

AD-A064 673

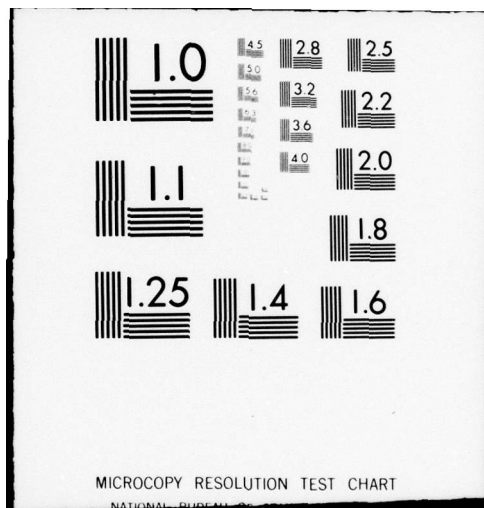
AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX F/G 5/9
ENVIRONMENTAL HEALTH CAREER LADDER, AFSCS 90730, 90750, 90770, --ETC(U)
DEC 78 L TAUSCHER

UNCLASSIFIED

NL

1 of 1
AD
A064673





LEVEL II

2

OCCUPATIONAL SURVEY REPORT

9 Final Rept.,



ADA064673

DDC FILE COPY

10 Leon/Tauscher

DDC
RECEIVED
FEB 15 1979
E

6 ENVIRONMENTAL HEALTH CAREER LADDER
AFSCs 90730, 90750, 90770, AND 90790

AFPT 90-987-298

11 DECEMBER 1978

12 71p

OCCUPATIONAL SURVEY BRANCH
USAF OCCUPATIONAL MEASUREMENT CENTER
RANDOLPH AFB TEXAS 78148

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

4/08 889

79 02 08 021

TABLE OF CONTENTS

	PAGE NUMBER
PREFACE -----	3
SUMMARY OF RESULTS -----	4
INTRODUCTION -----	5
SURVEY METHODOLOGY -----	6
CAREER LADDER STRUCTURE -----	9
JOB DIFFERENCES ASSOCIATED WITH EXPERIENCE LEVELS ---	20
ANALYSIS OF TASK DIFFICULTY -----	29
JOB SATISFACTION INDICATORS -----	36
COMPARISON OF CURRENT SURVEY TO THE 1973 SURVEY -----	40
APPENDIX A -----	43
APPENDIX B -----	44
APPENDIX C -----	45

ACCESSION for		
NTIS	White Section	<input checked="" type="checkbox"/>
DDC	Buff Section	<input type="checkbox"/>
UNANNOUNCED		<input type="checkbox"/>
JUSTIFICATION _____		
BY _____		
DISTRIBUTION/AVAILABILITY CODES		
Dist. AVAIL. and/or SPECIAL		
A		

PREFACE

This report presents the results of an Air Force Occupational Survey of the Environmental Health career ladder (AFSCs 90730, 90750, 90770, and 90790). This project was directed by USAF Program Technical Training, Volume 2, dated June 1977. Authority for conducting occupational surveys is contained in AFR 352. Computer outputs from which this report was produced are available for use by operating and training officials.

The survey instrument was developed by First Lieutenant Helen Campbell, Inventory Development Specialist. Captain Leon Tauscher analyzed the survey data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Survey Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78148.

Computer programs for analyzing the occupational data were designed by Dr. Raymond E. Christal, Occupational and Manpower Research Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Project Analysis and Programming Branch, Computational Sciences Division, AFHRL.

Copies of this report are available to air staff sections, major commands, and other interested training and management personnel upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Survey Branch (OMY), Randolph AFB, Texas 78148.

This report has been reviewed and is approved.

BILLY C. McMASTER, Col, USAF
Commander
USAF Occupational Measurement
Center

WALTER E. DRISKILL, Ph.D.
Chief, Occupational Survey Branch
USAF Occupational Measurement
Center

SUMMARY OF RESULTS

1. Survey Coverage: Inventory booklets were administered to Environmental Health incumbents during the period February through April 1978. The results of this survey are based on responses from 481 respondents or 77 percent of the 624 personnel assigned to this career ladder worldwide.
2. Career Ladder Structure: Overall, members in this career ladder, as a whole, perform highly homogeneous jobs that cover the total spectrum of environmental health protection functions. Two major clusters were identified: General Environmental Health Personnel which comprised 79 percent of the survey sample, and Personal Health Protection Personnel which comprised nine percent of the sample. Two small independent job types were also identified which dealt with water analysis and sanitation surveys and with radiological health protection.
3. Career Ladder Progression: Each skill level group performed a relatively large common core of environmental health tasks. Many of the technical tasks, especially those related to noise control, were common across all DAFSC groups. The job performed by 5-skill level personnel was almost exclusively technical in nature, encompassing the full spectrum of environmental health responsibilities. In contrast, the much broader and more difficult 7-skill level job was evenly focused on technical and supervisory functions. Superintendents performed primarily a managerial function but also performed a broad range of technical functions.
4. AFR 39-1 Evaluation: Overall, the AFR 39-1 Specialty Descriptions gave a thorough and accurate picture of the functions performed by career ladder personnel. The one exception was exclusion in the 7-skill level description of epidemiological functions performed in the field.
5. STS Review: With minor exceptions, the newly revised 907X0 STS (tentative as of June 78) appeared to accurately represent all job functions identified in this survey. All tasks cross-referenced to the STS were performed by substantial percentages of 3-, 5-, or 7-skill level personnel.
6. Comparison With Previous Surveys: The 907X0 career ladder has changed substantially since the last survey in 1973. While many of the job functions performed in 1973 are still being performed in 1978, the pattern or configuration of the job has changed primarily in those areas affected by Occupational Health and Safety Administration (OSHA) regulations.

79 02 08 021

OCCUPATIONAL SURVEY REPORT
ENVIRONMENTAL HEALTH CAREER LADDER
(AFSCs 90730, 90750, 90770, 90790)

INTRODUCTION

This a report of the Environmental Health career ladder (AFSCs 90730, 90750, 90770, and 90790) completed by the Occupational Survey Branch, USAF Occupational Measurement Center in November 1978. A previous occupational survey of this career ladder was published during August 1973.

Since the 1973 survey, the classification structure of this career ladder has not changed, nor has the relative number of personnel assigned. The title of the career ladder, however, has been changed from "Preventive Medicine" to "Environmental Health". Also, the career field is no longer responsible for monitoring the USAF Weight Control Program. A major trend has been the increasing influence of the health and safety standards, rules, and regulations of the Occupational Health and Safety Administration (OSHA).

OSHA was created by Public Law in 1969 and empowered by subsequent Executive Orders. Since OSHA's inception, it has steadily increased in its activity and in its ability to develop and enforce regulations designed to protect employees from hazards present in their working or living environments. Since Environmental Health personnel are charged with the responsibility of insuring the occupational and community health and safety of Air Force personnel, they became directly affected by any OSHA actions.

This survey is being conducted at the joint request of the 907X0 training manager from the USAF School of Aerospace Medicine (USAFSAM) and the 907X0 personnel classification manager from AFMPC. While the regulations set forth by OSHA have not generally added any new duties and responsibilities to the environmental health career ladder, they are anticipated to have changed the frequency and specificity with which many existing tasks are performed. Such influence could have a significant impact on technical training provided in the basic 3ABR90730 (Category A) course at USAFSAM and also on the classification structure necessary for the career field to perform its function. This report basically addresses four major areas of concern: (1) Survey methodology; (2) the job structure found within the career ladder and how it relates to skill level and experience groups; (3) comparison of the current job structure with career ladder documents such as AFR 39-1 Specialty Job Descriptions and the Specialty Training Standard (STS); and (4) comparison of the findings of the current survey with those of the 1973 study.

SURVEY METHODOLOGY

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-987-298. The survey instrument from the 1973 study served as the basis for developing the new task inventory. The previous task list was refined and modified through a thorough research of career field publications and directives and personal interviews with 9 experienced subject-matter specialists from three bases (Brooks, Kelly, and Lackland AFBs). The final result was a task list containing 337 tasks grouped under 14 duty categories and a background section which included information about each respondent such as grade, TAFMS, duty title, work function assigned, types of equipment used, and job interest.

Survey Administration

During the period February through April 1978, consolidated base personnel offices in operational units worldwide administered the inventory booklets to personnel holding Environmental Health DAFSCs. These personnel were selected from a computer generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL). Each individual who completed the inventory first completed an identification and biographical information section, then checked each task performed in their current job.

After checking all tasks performed, each respondent then rated each of these tasks on a nine-point scale showing relative time spent on that task as compared to all other tasks checked. The ratings ranged from one (very-small-amount time spent) through five (about-average time spent) to nine (very-large amount time spent). To determine relative time spent for each task checked by a respondent, all a respondents ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total task responses and the quotient multiplied by 100. This procedure provides a basis for comparing tasks not only in terms of percent members performing but also in terms of average percent time spent.

Survey Sample

Personnel were selected to participate in this survey so as to insure proper representation across MAJCOM and DAFSC groups. Table 1 reflects the percentage distribution, by major command, of assigned personnel in the career ladder as of January 1978. Also listed in this table is the percent distribution, by major command, of respondents in the final survey sample.

TABLE 1
COMMAND REPRESENTATION OF SURVEY SAMPLE

<u>COMMAND</u>	<u>PERCENT OF PERSONNEL ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AFLC	6	7
AFSC	13	12
ATC	8	9
MAC	12	14
PACAF	8	7
SAC	18	21
TAC	14	11
USAFE	13	13
OTHER	8	6

The DAFSC distribution of the survey sample is presented in Table 2. The 481 respondents making up this final sample represent 77 percent of the 624 personnel assigned to this career ladder worldwide. Generally, it appears that the survey sample provides very good representation from all MAJCOMS and from all skill level DAFSCs.

TABLE 2
DAFSC DISTRIBUTION OF SURVEY SAMPLE

<u>DAFSC</u>	<u>NUMBER AUTHORIZED</u>	<u>NUMBER SAMPLED</u>	<u>PERCENT SAMPLED</u>
90730	39	33	85%
90750	386	263	68%
90770	176	152	86%
90790	<u>23</u>	<u>19</u>	<u>83%</u>
TOTAL	624	481	77%

In Table 3, the Total Active Federal Military Service (TAFMS) survey sample distribution is presented. Notice that 31 percent of the survey sample are in their first enlistment.

TABLE 3

TAFMS DISTRIBUTION OF SURVEY SAMPLE

<u>MONTHS TIME IN SERVICE</u>	<u>6-48</u>	<u>49-96</u>	<u>97-144</u>	<u>143-192</u>	<u>193-240</u>	<u>240+</u>
NUMBER IN FINAL SAMPLE	147	122	62	49	40	40
PERCENT OF SAMPLE	31%	25%	13%	10%	9%	9%

CAREER LADDER STRUCTURE

An essential part of the USAF Occupational Analysis program is the examination of career ladder personnel in terms of the actual structure of the jobs they perform rather than the career field structure outlined in official documents. This examination of actual structure is made possible by the Comprehensive Occupational Data Analysis Programs (CODAP) which generate a hierarchical clustering of all jobs performed in the field based upon the similarity of tasks performed and the relative time spent on these tasks. Background factors such as DAFSC, job title, grade, position, etc. have no bearing on the job clustering process. Rather, these factors are used only to help describe the members of job groups that the CODAP process has identified.

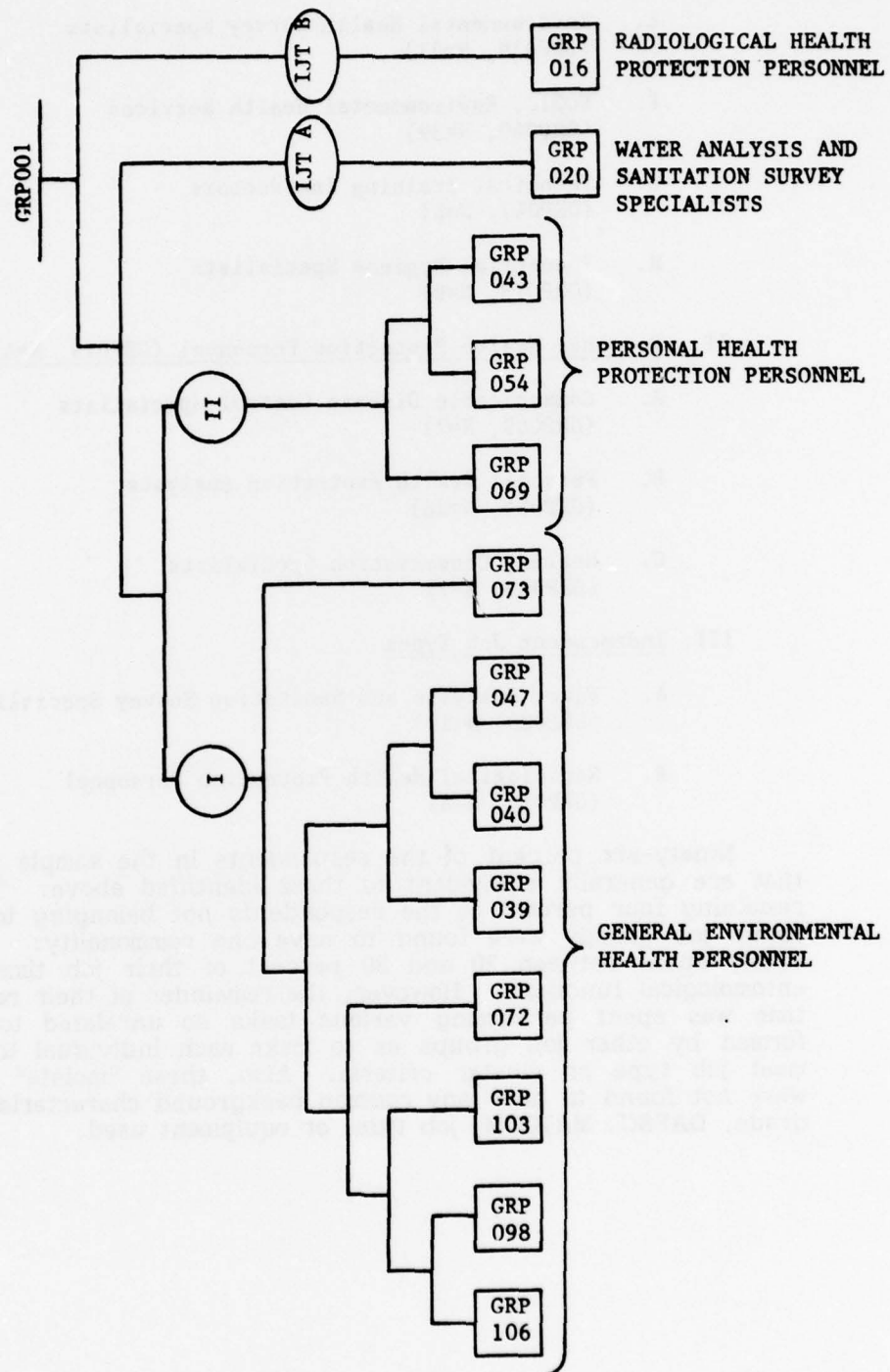
The basic identifying group used in the hierarchical job structuring analysis is the Job Type. A job type is a group of individuals who perform many of the same tasks and who also spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as Clusters. In most cases, a cluster will contain more personnel than the total number of members within its job type groups, since it also contains respondents whose pattern of tasks performed is too different to meet job type criteria, but which is similar enough to meet cluster criteria. Finally, there are often cases of specialized job types that are too dissimilar to be grouped into any cluster. These fairly unique groups are labeled Independent Job Types.

Based on task and relative time spent similarities, the jobs performed in the 907X0 career ladder are as illustrated in Figure 1. The two clusters, their related job types, and the two independent job types which constitute this career ladder structure are listed below. Selected background characteristics and "job time spent on duties" figures are contained in Tables 4 through 7. Representative duties, distinguishing tasks, and a descriptive summary of the jobs performed by the respective job types are presented in Appendix A.

I. General Environmental Health Personnel (GRP018, N=328)

- A. Environmental Health Section Supervisor
(GRP106, N=86)
- B. Community and Personal Health Personnel
(GRP098, N=104)
- C. Disease and Injury Records and Analysis Specialists
(GRP103, N=5)

FIGURE 1
ENVIRONMENTAL HEALTH CAREER LADDER STRUCTURE



- D. Occupational Health Survey Specialists
(GRP072, N=44)
- E. Environmental Health Survey Specialists
(GRP039, N=81)
- F. NCOIC, Environmental Health Services
(GRP040, N=39)
- G. Technical Training Instructors
(GRP047, N=6)
- H. Industrial Hygiene Specialists
(GRP073, N=9)

II. Personal Health Protection Personnel (GRP019, N=43)

- A. Communicable Disease Control Specialists
(GRP069, N=7)
- B. Personal Health Protection Analysts
(GRP054, N=28)
- C. Hearing Conservation Specialists
(GRP043, N=7)

III. Independent Job Types

- A. Water Analysis and Sanitation Survey Specialists
(GRP020, N=29)
- B. Zoological Health Protection Personnel
(GRP016, N=8)

Ninety-six percent of the respondents in the sample perform jobs that are generally equivalent to those identified above. Three of the remaining four percent of the respondents not belonging to any of the above job groups were found to have one commonality: they individually spent between 20 and 30 percent of their job time performing entomological functions. However, the remainder of their respective job time was spent performing various tasks so unrelated to those performed by other job groups as to make each individual too unique to meet job type or cluster criteria. Also, these "isolate" respondents were not found to have any common background characteristics such as grade, DAFSC, MAJCOM, job title, or equipment used.

Job Cluster Descriptions

I. General Environmental Health Personnel (GRP013, N=328).

This is the larger of the two clusters in this analysis, and consists of 79 percent of the survey respondents. Not only is this group extremely large, but it is also very homogeneous with respect to the job functions it performs. First of all, the group as a whole performs every task in the job inventory. Secondly, there is a common core of 80 tasks that are performed by 50 percent or more of all group members and that consume over 55 percent of the group members total job time. These 80 core tasks are almost exclusively common occupational or community health type tasks and several directly related administrative or managerial tasks. They include performing a broad range of occupational and community health type surveys and the complete spectrum of hearing conservation tasks in the inventory.

Thirdly, there are another 145 tasks, many of which are more specialized in nature, that are performed by 20 to 49 percent of the members of this cluster. And fourthly, as shown in Appendix A, relatively high percentages of all group members use a very wide range of the many types of equipment available in the field.

Despite the high degree of homogeneity described above, the eight job types within the cluster are readily distinguishable from each other in terms of the amount of emphasis placed in various environmental health functions. One job type specializes in technical training, two in supervisory or managerial functions, and the other five in various configurations of occupational or community health protection functions, or both. With the exception of technical trainers (GRP047), however, no job type performed any tasks exclusively. Rather, the members in this cluster appear to perform a general "team" health protection function, with some members of the team applying noticeably more emphasis to one or more of the fundamental environmental health areas.

The considerable variance in "job function" emphasis among the job types is well reflected in Table 4. As can be seen, individuals in this cluster as a whole spend 40 percent of their job time performing occupational health duties. However, the job types vary considerably, from a low of eight percent time spent by Environmental Health Services NCOICs (GRP047) to a high of 67 percent time spent by Industrial Hygienists (GRP073). This same pattern holds true for job time spent performing community health duties and management, supervision, and training duties. Likewise, this pattern of variability among the job types holds true for other background characteristics as well, as shown in Table 6.

The high degree of variability in background information for job types suggests that from a technical (or non-supervisory) standpoint, who the person is or what his particular background is has very little to do with the job that is performed. Rather, the 79 percent of environmental health personnel represented in this sample can perform almost any of the duties of the career field. The occupational hazards

present in any particular environment, and perhaps the number of 907X0 personnel available at a unit, appear to have more bearing on the jobs that are performed than any other factors evaluated in this survey.

II. Personal Health Protection Personnel (GRP019, N=43). The 43 respondents in this cluster perform a very limited job function compared to those personnel in the General Environmental Health cluster. The three job types within this cluster each perform a very limited job function related to either communicable disease control, hearing conservation, monitoring personal health records, or some combination of the three. Occupational or community environmental health surveys are not performed to any extent by personnel in this cluster. Rather, they appear to perform only those functions which are conducted in a clinic, hospital, or office setting. They do not perform any unique or specialized tasks that are not also performed by members of the larger cluster. Instead, they are characterized by the tremendous amount of job time spent on a very low number of tasks. Communicable Disease Control Specialists (GRP069), for example, spend over 58 percent of their job time performing only 15 tasks, all of which are directly related to routine epidemiological functions. The same is true for Hearing Conservation Specialists (GRP043) who spend 55 percent of their job time performing only 10 tasks, all of which are directly related to personal hearing protection. The third job type in the cluster, Personal Health Protection Analysts, perform both the communicable disease control and the hearing conservation functions. In addition, they screen and monitor the health records of personnel exposed to occupational hazards.

As a whole, the members of this cluster perform a very low average number of tasks (44), perform a very-much-below average difficulty job (JDI=7.2 vs the average 13.0; see Task Difficulty section), have a relatively low average amount of time in the career field (3.5 years), and use a very limited amount of the equipment available in the field. As shown in table 7, 72 percent of the members of this cluster are 5-skill level personnel. Forty percent of the members are in their first enlistment.

III. Independent Job Types. As shown in Figure 1, two job types were found that perform specialized job functions that set the members of these groups apart from the personnel in the two main clusters. Noteworthy, again, is the fact that the members of these two independent job types do not perform any tasks that are not also performed by members of the General Environmental Health Cluster. Rather, these two independent groups are characterized by the limited types of tasks they perform, and by the high amount of job time spent on these tasks.

Water Analysis and Sanitation Survey Specialists (GRP020) perform an average of only 43 tasks and spend 66 percent of their job time performing community health duties related to monitoring water, waste disposal and sewage systems (Duty H) and conducting environmental

health surveys (Duty G) (see Table 5). The environmental health survey tasks they perform are almost exclusively related to functions dealing with water or waste material. The six percent of the sample respondents belonging to this job type are primarily 5-skill level personnel. While most members are assigned to operational units, several members reported being assigned to the Occupational Environmental Health Laboratory (OEHL) at Brooks AFB. As a whole, members of this group have an average of 3.9 years time in the career field, an average grade of 4.1, and perform a very-much-below average difficulty job (JDI=6.1).

The second independent job type, Radiological Health Protection Personnel (GRP016), contains only two percent of the sample respondents. This group of exclusively 5-, 7-, and 9-skill level personnel spends 37 percent of its job time conducting radiological health programs (Duty K) and another 10 percent on field medical disaster operation (Duty L). The disaster operation tasks they perform are almost all related to radiological protection functions. The group members are characterized by their high experience level (average of 10.9 years in career field) and their high grade level (average grade =5.8). Seventy percent of the members are assigned to Brooks AFB, either to USAFSAM or to OEHL; the remaining 30 percent are assigned to large medical facilities. As a whole, the group performs a low average number of tasks (51) and a below-average difficulty job (JDI=10.9).

Summary

The results of this job structure analysis clearly indicate that members of the 907X0 career ladder, as a whole, perform highly homogeneous jobs that cover the total spectrum of environmental health protection functions. The interrelatedness of the job functions performed in this career field tends to validate the existing single ladder classification structure.

There are some 80 tasks related to routine occupational and community health surveys and to hearing conservation functions that are common to high percentages of the members in the general environmental health cluster. The common core tasks that relate to communicable disease control and hearing conservation are also common to the members in the Personal Health Protection Cluster. The primary differentiating factor between clusters and between job types (including independent job types) is the amount of job time spent by group members on particular configurations of tasks; no job type performed a unique job in the sense in that its members performed some tasks exclusively (that is, some tasks not performed to any extent by any other job type). Rather, it was the amount of emphasis that each group placed on the job function they performed that differentiated the groups.

With the exception of the job types in the personal health protection cluster, a primary characteristic of the job structure that emerged in this analysis is the high degree of variability between job types with respect to background characteristics of the members such as DAFSC, grade, and experience level, and to a host of job-associated factors such as size of the job-type, average number of tasks performed, and job difficulty. Variance such as this tends to indicate that unit size, and the environmental hazards present at the unit location have a primary influence on defining the jobs that personnel perform, irrespective of their experience level, grade, DAFSC, etc.

TABLE 4
PERCENT TIME SPENT PERFORMING DUTIES BY FUNCTIONAL JOB GROUPS

DUTIES	CLUSTER I GENERAL ENVIRONMENTAL HEALTH	JOB TYPES IN CLUSTER I							INDUSTRIAL HYGIENE
		SECTION SUPERVISORS	COMMUNITY AND PERSONAL HEALTH	DISEASE, INJURY RECORDS, AND ANALYSIS	OCCUPATIONAL HEALTH	ENVIRONMENTAL HEALTH SURVEY	HEALTH SERVICES NCOIC	TECHNICAL TRAINING	
<u>MANAGEMENT, SUPERVISION AND TRAINING</u>									
A PLANNING AND ORGANIZING	11	15	8	14	9	5	27	15	7
B DIRECTING AND IMPLEMENTING	6	9	3	2	3	2	16	13	2
C INSPECTING AND EVALUATING	8	11	6	6	8	4	17	9	5
D TRAINING	3	6	1	1	1	1	8	38	1
TOTAL	28	41	18	23	21	12	68	74	15
E MAINTAINING FORMS, RECORDS, AND PUBLICATIONS	4	4	4	7	2	6	3	1	2
<u>OCCUPATIONAL HEALTH</u>									
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	30	24	34	18	52	27	13	6	63
K CONDUCTING RADIOLOGICAL HEALTH PROGRAMS	6	7	7	7	9	7	2	2	4
TOTAL	40	31	31	25	61	34	15	8	67
<u>COMMUNITY HEALTH</u>									
F PERFORMING EPIDEMIOLOGICAL FUNCTIONS	6	4	7	17	2	9	3	1	3
G PERFORMING ENVIRONMENTAL HEALTH SURVEYS	8	5	10	8	4	17	3	8	4
H MONITORING WATER, WASTE DISPOSAL, AND SEWAGE SYSTEMS	7	5	9	8	3	14	2	*	1
I PERFORMING MEDICAL ENTOMOLOGICAL FUNCTIONS	4	4	5	8	2	4	2	4	2
TOTAL	25	18	31	41	11	44	10	13	10
<u>SPECIAL FUNCTIONS</u>									
L PERFORMING OR PRACTICING FIELD MEDICAL DISASTER OPERATIONS	2	3	2	1	2	1	2	2	2
M PERFORMING SPECIAL ENVIRONMENTAL HEALTH FUNCTIONS	2	2	3	3	3	2	2	*	4
N PERFORMING BIO-ENVIRONMENTAL SUPPORT OF MISSILE OPERATIONS	*	*	*	*	*	*	*	*	1
TOTAL	4	5	5	4	5	3	4	2	7

* LESS THAN ONE PERCENT TIME SPENT

TABLE 5
PERCENT TIME SPENT PERFORMING DUTIES BY FUNCTIONAL JOB GROUPS

DUTIES	CLUSTER II		CLUSTER II JOB TYPES			INDEPENDENT JOB TYPES		
	PERSONAL HEALTH PROTECTION	COMMUNICABLE DISEASE CONTROL	PERSONAL HEALTH PROTECTION	HEARING CONSERVATION AND SANITATION	WATER ANALYSIS	HEALTH PROTECTION		
<u>MANAGEMENT, SUPERVISION AND TRAINING</u>								
A PLANNING AND ORGANIZING	12	16	13	6	9	16		
B DIRECTING AND IMPLEMENTING	5	3	6	3	3	8		
C INSPECTING AND EVALUATING	4	3	5	3	6	8		
D TRAINING	1	1	1	1	1	6		
TOTAL	22	23	25	14	19	38		
E MAINTAINING FORMS, RECORDS, AND PUBLICATIONS	4	6	6	4	4	6		
<u>OCCUPATIONAL HEALTH</u>								
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	34	5	34	63	5	1		
K CONDUCTING RADIOLOGICAL HEALTH PROGRAMS	3	3	3	1	2	37		
TOTAL	37	8	37	64	7	38		
<u>COMMUNITY HEALTH</u>								
F PERFORMING EPIDEMIOLOGICAL FUNCTIONS	26	58	23	5	3	*		
G PERFORMING ENVIRONMENTAL HEALTH SURVEYS	2	*	1	7	22	3		
H MONITORING WATER, WASTE DISPOSAL, AND SEWAGE SYSTEMS	2	*	1	4	34	*		
I PERFORMING MEDICAL ENTOMOLOGICAL FUNCTIONS	1	2	2	*	7	1		
TOTAL	31	60	27	16	66	4		
<u>SPECIAL FUNCTIONS</u>								
L PERFORMING OR PRACTICING FIELD MEDICAL DISASTER OPERATIONS	2	1	2	2	*	10		
M PERFORMING SPECIAL ENVIRONMENTAL HEALTH FUNCTIONS	1	2	1	*	3	3		
N PERFORMING BIO-ENVIRONMENTAL SUPPORT OF MISSILE OPERATIONS	*	*	*	*	*	*		
TOTAL	3	3	3	2	3	13		

* LESS THAN ONE PERCENT TIME SPENT

TABLE 6
BACKGROUND CHARACTERISTICS OF FUNCTIONAL JOB GROUP MEMBERS

BACKGROUND VARIABLE	CLUSTER I		JOB TYPES IN CLUSTER I						
	GENERAL ENVIRONMENTAL HEALTH	SECTION SUPERVISORS	COMMUNITY AND PERSONAL HEALTH	DISEASE, INJURY RECORDS, AND ANALYSIS	OCCUPATIONAL HEALTH	ENVIRONMENTAL HEALTH SURVEY	HEALTH SERVICES NCOIC	TECHNICAL TRAINING	INDUSTRIAL HYGIENE
NUMBER IN GROUP	328	86	104	5	44	81	39	6	9
PERCENT OF SAMPLE	79%	18%	22%	1%	9%	17%	8%	1%	2%
PERCENT IN FIRST ENLISTMENT	28%	4%	41%	20%	39%	39%	0%	0%	33%
DAFSC DISTRIBUTION									
90730	6%	2%	8%	-	2%	16%	-	-	-
90750	53%	19%	72%	80%	77%	74%	5%	-	67%
90770	35%	73%	16%	20%	21%	7%	72%	83%	11%
90790	4%	6%	-	-	-	-	23%	17%	-
AVERAGE NUMBER OF TASKS PERFORMED	113	179	127	120	83	64	99	59	37
AVERAGE GRADE	5.0	6.1	4.3	4.4	4.4	4.1	6.8	6.3	4.7
JOB DIFFICULTY INDEX*	14.5	18.8	15.7	13.2	14.8	8.5	15.4	11.5	11.0
AVERAGE YEARS IN CAREER FIELD	6.8	11.1	4.0	4.5	4.8	2.9	14.0	14.3	5.4
AVERAGE YEARS IN SERVICE	9.6	15.0	6.2	7.8	6.5	5.7	17.9	15.3	7.7
AVERAGE NUMBER SUPERVISED	2.6	2.8	1.8	0	1.9	2.2	3.4	1.8	2.0

* SEE ANALYSIS OF TASK DIFFICULTY SECTION

TABLE 7
BACKGROUND CHARACTERISTICS OF FUNCTIONAL JOB GROUP MEMBERS

BACKGROUND VARIABLE	CLUSTER I I		JOB TYPES IN CLUSTER II				INDEPENDENT JOB TYPES		
	PERSONAL HEALTH PROTECTION	PERSONAL HEALTH PROTECTION	COMMUNICABLE DISEASE CONTROL	PERSONAL HEALTH PROTECTION	HEARING CONSERVATION	WATER ANALYSIS AND SANITATION	WATER ANALYSIS AND SANITATION	RADIOLOGICAL HEALTH PROTECTION	RADIOLOGICAL HEALTH PROTECTION
NUMBER IN GROUP	43	43	7	28	7	29	8		
PERCENT OF SAMPLE	9%	9%	1%	6%	1%	6%	2%		
PERCENT IN FIRST ENLISTMENT	40%	40%	57%	25%	86%	45%	13%		
DAFSC DISTRIBUTION									
90730	12%	12%	14%	7%	14%	10%	10%	13%	
90750	72%	72%	86%	68%	86%	66%	66%	63%	
90770	14%	14%	-	-	-	17%	17%	25%	
90790	-	-	-	-	-	-	-	-	
AVERAGE NUMBER OF TASKS PERFORMED	44	44	26	52	30	43	51		
AVERAGE GRADE	4.3	4.3	4.3	4.5	3.4	4.1	5.8		
JOB DIFFICULTY INDEX*	7.2	7.2	5.7	8.5	4.0	6.1	10.9		
AVERAGE YEARS IN CAREER FIELD	3.5	3.5	1.4	4.5	1.7	3.9	10.9		
AVERAGE YEARS IN SERVICE	6.8	6.8	6.5	8.1	2.8	5.6	13.3		
AVERAGE NUMBER SUPERVISED	2.3	2.3	3.0	2.1	0	1.7	1.7		

* SEE ANALYSIS OF TASK DIFFICULTY SECTION

JOB DIFFERENCES ASSOCIATED WITH EXPERIENCE LEVELS

In addition to examining overall structure of the career ladder, it is important from a personnel management viewpoint to examine general skill level or experience level differences in jobs performed and to examine such differences in light of the career ladder structure identified in this analysis. This information can also be used to determine how accurately career ladder documents such as AFR 39-1 specialty descriptions and the Specialty Training Standard (STS) reflect the actual tasks or jobs being performed by career ladder personnel in the field.

Skill Level Descriptions

Members of this career ladder generally spend 62 percent of their job time performing general occupational and community health functions. Another 33 percent of their job time is spent performing managerial, supervisory, and administrative duties, and the remaining five percent is spent performing special types of environmental health functions. As shown in Table 8, however, this overall distribution of job time across duties is not clearly reflected in the respective 3-, 5-, 7-, and 9-skill level job-time distributions. While 3- and 5-skill level personnel spend the greatest majority of their time performing technical duties, 7- and 9-skill level personnel spend a greater proportion of their time performing supervisory and management duties. Differences in tasks performed within the technical and the supervision-management duty areas are also very pronounced for most skill level personnel in this career field. This fact is clearly evidenced in Tables II, III, and IV of Appendix B, which contain "representative tasks performed" by 5-, 7-, and 9-skill level personnel, respectively.

Table 9 reflects the distribution of each DAFSC group within the functional groups identified in the CAREER LADDER STRUCTURE section. Consistent with the finding that 79 percent of the total sample comprise the General Environmental Health Cluster is the finding here that 72 to 88 percent of each skill level group also belongs to this cluster. Furthermore, like the members of Cluster I, as a whole high percentages of all members of the 907X0 career field perform a common core of tasks directly or indirectly related to general environmental health functions. Table I of Appendix B contains a list of 57 tasks that are performed by 50 percent or more of all 907X0 personnel. These 57 core tasks involve over 45 percent of the job-time of 907X0 personnel as a whole, and are performed to a significant degree by members of all skill level groups. Higher skill level groups generally perform these core tasks to a lesser degree, and spend lesser amounts of time performing them, than do the lower skill level groups.

Another commonality present among all skill level groups is that all tasks in the survey are performed to some extent by some members within each skill level group. In other words, there are no tasks performed by only one skill-level group that are not also performed by some other skill-level group. This fact, taken in conjunction with the "core task" finding, suggests that the career field as a whole is very homogeneous.

Despite the homogeneity, there are several very noticeable job differences both within and between the 907X0 skill level groups. As shown in Table 9, for example, the distribution of respective skill level personnel within job types is very different. While 3- and 5-skill level personnel in Cluster I are heavily distributed in the Community and Personal Health and Environmental Health Survey job types, 7- and 9-skill level members are heavily distributed in the Section Supervisor and the Health Services NCOIC job types. In addition, the Personal Health Protection Cluster is almost exclusively comprised of 3- and 5-skill level personnel, whereas the independent job types contain various mixtures of 5-, 7-, and 9-skill level personnel. These DAFSC differences in distribution across functional job groups are reflected to a great degree in the job descriptions of the respective DAFSC groups.

Three- and 5-skill level personnel perform virtually identical jobs, and thus the discussions here will be limited to the much larger group of DAFSC 90750 personnel. The "average" job performed by 5-skill level personnel is virtually identical to that performed by first enlistment personnel (1-48 months AFMS) and is almost exclusively technical in nature. Tasks performed cover the total range of technical tasks in the survey, including the very simple and more common tasks such as collecting potable water samples and surveying the many base-service facilities, to the very complex such as conducting air pollution studies and interpreting the results of dust sample and chemical sample analyses. Generally, however, the more difficult or complex tasks are performed by much lower percentages of the group than are the simpler and more routine tasks. There are over 60 tasks in the inventory that are performed by 50 percent or more of 5-skill level personnel and that consume over 55 percent of their total job time (many of these tasks are listed in Table II, Appendix B). These core tasks indicate the high degree of homogeneity of the overall job performed by 5-skill level personnel. These personnel do specialize somewhat, however, as indicated by their distribution within the community health, occupational health, and personal health protection job groups (See Table 9). The specialization, however, is much less pronounced than the commonality reflected in the core tasks they perform.

In very sharp contrast to the job performed by 5-skill level personnel, the job performed by 7-skill level personnel encompasses not only the complete range of technical tasks in the inventory but also a very broad range of supervisory and managerial tasks. DAFSC 90770 personnel as a whole perform a very high average number of tasks compared to 90750 personnel (127 vs 85), and spend relatively equal amounts of job time performing both technical and supervisory/managerial duties (see Table 8).

Like 5-skill level personnel, 7-skill level personnel perform a large common core of tasks, and thus as a whole tend to perform a very homogeneous job function. There are over 100 tasks that 50 percent or more of these personnel perform, and this common core consumes over 60 percent of their job time. Many of these core tasks are contained in Table III of Appendix B. Unlike 5-skill level personnel, however, the core tasks of 7-skill level members are approximately a 50-50 mixture of technical tasks and supervisory/ managerial tasks. This approximate mixture of technical and non-technical tasks is consistent for those remaining inventory tasks which are performed by 20 to 50 percent of all DAFSC 90770 personnel, which illustrates the fact that they assume a full spectrum of supervisory and managerial functions in addition to the technical functions they perform. This feature of the 7-skill level job is well illustrated by the data in Table 10, which contains those tasks which highlight major differences between 5- and 7-skill level personnel. Notice that the largest differences between these two skill levels, in terms of percent members performing the tasks, are associated with supervisory/managerial tasks; 5-skill level personnel do not perform any of these to any appreciable extent. Secondly, notice that the job functions portrayed by the technical tasks upon which they differ are of a very different nature. Higher percentages of 5-skill level personnel perform the more common or routine environmental health tasks (see top portion of Table 10) while higher percentages of 7-skill level personnel perform the less common, more difficult, and in some cases management-oriented types of technical tasks (see bottom portion of Table 10).

Taken together, these findings related to the 7-skill level job indicate that DAFSC 90770 personnel perform a very broad, complex and homogeneous job. It encompasses most of the technical functions of the 5-skill level job, includes greater emphasis on many of the more complex technical tasks in the field, and expands tremendously to include broad supervisory and managerial functions. Because of the broadened nature of this job, 7-skill level personnel necessarily spend less job time on each of the respective tasks they perform than do 5-skill level personnel. Nevertheless, relatively high percentages of them still remain actively involved in the performance of the whole spectrum of technical environmental health functions, including the many types of routine survey functions.

Superintendents perform a job that is very noticeably different from the other DAFSC groups in this career field, and very noticeably different from superintendents in other USAF specialty areas. Regarding this last point, it is very common in most career areas, at least non-medical career areas, for superintendents to spend 85 to 95 percent of their job time performing strictly managerial and supervisory functions. As shown in Table 8, however, DAFSC 90790 personnel spend only 65 percent of their job time in these areas and over 30 percent of their job time in technical environmental health areas. Thus, 9-skill level personnel in this career field appear much more technically oriented than those in other Air Force specialties.

Nevertheless, compared to other environmental health skill level groups, the primary thrust of the superintendents' job is management (see Table IV in Appendix B). This is further illustrated in the comparison task data contained in Table 11, which highlights differences between 7- and 9-skill level personnel. Additionally, fifty percent or more of 9-skill level personnel perform a common core of over 80 tasks which involve over 60 percent of their job time. Unlike the 7- and 5-skill level core tasks, these core tasks are almost exclusively managerial or supervisory in nature. But in addition to these core managerial tasks, there are over 120 technical tasks, covering almost the complete range of environmental health areas, that are performed by 20 to 50 percent of all 9-skill level personnel. Some of the more routine tasks like surveying ice making and storage facilities, documenting physical examinations, or screening audiogram records are performed very little or not at all. Overall, the primarily managerial job performed by superintendents is well above average in difficulty and encompasses a much greater technical involvement than normal for superintendents in other career fields.

In summary, DAFSC 907X0 personnel as a whole tend to perform generally broad and homogeneous jobs. Each skill level group performs a relatively large common core of environmental health tasks. Many of the technical tasks, especially those related to noise control, are common across all DAFSC groups. The job performed by 5-skill level personnel is almost exclusively technical in nature, encompassing the total spectrum of environmental health responsibilities. In contrast, the much broader and more difficult 7-skill level job is about evenly focused in technical and in supervisory/managerial functions. It continues to encompass the complete range of technical functions of the 5-skill level job, assumes the added supervisory and managerial functions, and increases to a great degree in its emphasis on many of the more difficult and less commonly performed technical tasks. Superintendents perform a primarily managerial function, but unlike superintendents in other specialty areas, they perform a broad range of technical functions and devote considerable time performing them.

AFR 39-1 Specialty Descriptions

In conjunction with the analysis of DAFSC groups, a comparison was made between the AFSC group job descriptions compiled from the survey data and the specialty descriptions in AFR 39-1 for all AFSCs in the 907X0 career ladder.

Overall, the AFR 39-1 specialty descriptions give a thorough and accurate picture of the spectrum of functions actually performed by 3-, 5-, 7-, and 9-skill level personnel. One major exception is the exclusion in the 7-skill level AFR 39-1 descriptions of the epidemiological functions they perform in the field. With the exception of Task F1, Administer tuberculin skin tests, substantial percentages of 7-skill level personnel perform every task listed in Duty F, Performing Epidemiological Functions. The percent of 7-skill level members performing

these tasks range from a low of 14 percent for task F11, Investigate vector-borne or vehicle-borne disease epidemics other than communicable diseases, to a high of 64 percent for Task F8, Interview venereal disease patients. To be more comprehensive, the 7-skill level AFR 39-1 job description should include these epidemiological functions.

Comparison of STS to Survey Data

During June 1978, training personnel from the USAF School of Aerospace Medicine (USAFSAM) cross-referenced the paragraphs (and subparagraphs) of STS 907X0 to the current inventory tasks. The newly revised STS (tentative as of June 78) was used to insure maximum currency. This section of the analysis focuses primarily on two areas of concern: 1) those tasks cross-referenced to the STS but not performed to any extent by 907X0 personnel, and 2) those tasks not cross-referenced to the STS but which are performed by considerable percentages of 3-, 5-, or 7-skill level personnel.

All tasks cross-referenced to the STS were being performed by substantial percentages of 3-, 5-, or 7-skill level personnel. Further, all primary jobs or functions identified in this report are contained in the tentative STS. However, four STS paragraphs related to technical environmental health functions have few if any inventory tasks cross-referenced to them: 1) Paragraph 14, Industrial Waste Management; 2) Paragraph 21, Ventilation; 3) Paragraph 25, Biological Hazards; and 4) Paragraph 27, Disaster Preparedness Medical Care and First Aid Treatment. While some tasks in the inventory may be generally or indirectly related to these four paragraphs, in the judgment of the USAFSAM personnel who performed the cross-referencing, none are specifically related to them. Thus, these four STS paragraphs need to be evaluated individually by experienced personnel in the field in the light of the overall survey data in order to determine whether or not they should continue to be included in the STS.

Table I in Appendix C contains 35 technical tasks not cross-referenced to the STS. While some of these may relate indirectly to existing STS paragraph content, there are two types or categories of tasks that do not. The first category relates to epidemiological laboratory functions (tasks M6-9). The second category involves tasks related to performing bio-environmental support of missile operations (Duty N). All of the involved tasks in these two categories, as listed in Appendix C, are being performed by 10 percent or less of either 3-, 5-, or 7-skill level personnel; yet all the tasks are being performed to some negligible extent. If these two functions are to continue to remain a part of the 907X0 realm of responsibility, it appears they should receive some mention in the STS.

With the minor exceptions noted above, the tentative 907X0 STS appears to accurately represent all job functions identified in the CAREER AREA STRUCTURE section of this report. Complete computer printouts of the data reflecting the match between the STS and the inventory tasks will be furnished to USAFSAM as a special Training Addendum to this report.

TABLE 8

PERCENT TIME SPENT ON DUTIES BY DAFSC GROUPS

DUTIES	DAFSC 907X0			
	3-LEVEL (N=33)	5-LEVEL (N=263)	7-LEVEL (N=152)	9-LEVEL (N=19)
<u>MANAGEMENT, SUPERVISION, AND TRAINING</u>				
A PLANNING AND ORGANIZING	9	8	17	24
B DIRECTING AND IMPLEMENTING	3	3	9	14
C INSPECTING AND EVALUATING	5	6	11	17
D TRAINING	1	2	6	10
TOTAL	18	19	43	65
E MAINTAINING FORMS, RECORDS, AND PUBLICATIONS	5	5	4	2
<u>OCCUPATIONAL HEALTH</u>				
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	27	32	23	11
K CONDUCTING RADIOLOGICAL HEALTH PROGRAMS	6	6	6	8
TOTAL	33	38	29	19
<u>COMMUNITY HEALTH</u>				
F PERFORMING EPIDEMIOLOGICAL FUNCTIONS	8	9	5	2
G PERFORMING ENVIRONMENTAL HEALTH SURVEYS	14	10	5	3
H MONITORING WATER, WASTE DISPOSAL, AND SEWAGE SYSTEMS	13	10	5	1
I PERFORMING MEDICAL ENTOMOLOGICAL FUNCTIONS	5	4	4	4
TOTAL	40	33	19	10
<u>SPECIAL FUNCTIONS</u>				
L PERFORMING OR PRACTICING FIELD MEDICAL DISASTER OPERATIONS	1	2	3	3
M PERFORMING SPECIAL ENVIRONMENTAL HEALTH FUNCTIONS	3	3	2	1
N PERFORMING BIO-ENVIRONMENTAL SUPPORT OF MISSILE OPERATIONS	-	-	-	-
TOTAL	4	5	5	4
<u>TASKS PERFORMED</u>				
AVERAGE NUMBER BY DAFSC GROUP	78	85	127	106

TABLE 9

DAFSC DISTRIBUTION OF 907X0 PERSONNEL WITHIN FUNCTIONAL JOB GROUPS

TITLE	PERCENT DAFSC MEMBERS WITHIN JOB GROUPS			
	DAFSC 90730 (N=33)	DAFSC 90750 (N=263)	DAFSC 90770 (N=152)	DAFSC 90790 (N=19)
<u>GENERAL ENVIRONMENTAL HEALTH PERSONNEL (CLUSTER I)</u>	72	77	88	85
ENVIRONMENTAL HEALTH SECTION SUPERVISORS	*	6	41	26
COMMUNITY AND PERSONAL HEALTH PERSONNEL	24	29	11	*
DISEASE AND INJURY RECORDS AND ANALYSIS PERSONNEL	*	2	*	*
OCCUPATIONAL HEALTH SPECIALISTS	8	13	6	*
ENVIRONMENTAL HEALTH SURVEY SPECIALISTS	39	23	5	*
NCOIC, ENVIRONMENTAL HEALTH SERVICES	*	*	18	47
TECHNICAL TRAINING INSTRUCTORS	*	*	3	5
INDUSTRIAL HYGIENE SPECIALISTS	*	2	*	*
<u>PERSONAL HEALTH PROTECTION PERSONNEL (CLUSTER II)</u>	15	12	4	*
COMMUNICABLE DISEASE CONTROL SPECIALISTS	*	2	*	*
PERSONAL HEALTH PROTECTION ANALYSTS	2	7	4	*
HEARING CONSERVATION SPECIALISTS	*	2	*	*
<u>INDEPENDENT JOB TYPES</u>				
WATER ANALYSIS AND SANITATION SURVEY SPECIALISTS	*	7	3	*
RADIOLOGICAL HEALTH PROTECTION PERSONNEL	*	*	3	*
OTHER (PERCENT MEMBERS NOT IN JOB GROUPS)	3	4	2	11

* ONE PERCENT OR LESS

TABLE 10

TASKS WHICH MOST CLEARLY DISTINGUISH BETWEEN DAFSC 90750 AND 90770 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 90750	DAFSC 90770	DIFFERENCE
E4 COMPLETE FLUORIDE/BACTERIOLOGICAL EXAMINATION OF WATER FORMS (DD FORM 686)	65	45	20
H1 COLLECT ICE SAMPLES FOR BACTERIOLOGICAL ANALYSES	60	41	19
G7 SURVEY BARBER OR BEAUTY SHOPS	68	50	18
K22 ISSUE, COLLECT, OR EXCHANGE DOSIMETER FILM	57	43	14
B12 PREPARE AIRMAN PERFORMANCE REPORTS (APR)	15	78	-63
C16 INSPECT APPEARANCE OF PERSONNEL	16	74	-58
A7 ESTABLISH WORK PRIORITIES OR PERFORMANCE STANDARDS	25	82	-56
B1 ASSIGN PERSONNEL TO DUTY POSITIONS	13	67	-54
D19 MAINTAIN TRAINING RECORDS SUCH AS ON-THE-JOB TRAINING RECORD FORMS (AF FORM 623)	12	65	-53
A30 SERVE ON AEROSPACE MEDICAL COUNCILS	15	64	-49
L1 BRIEF FIELD OFFICIALS ON POSSIBLE HEALTH HAZARDS	20	56	-36
J37 REVIEW OR UPDATE EXCEPTION CODE LISTINGS	23	56	-33
I32 REVIEW PEST CONTROL SUMMARY REPORT	11	42	-31
L2 BRIEF FIELD OFFICIALS ON TYPES OF DECONTAMINATION REQUIRED	20	51	-31
E13 MAINTAIN OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) REFERENCE FILES	28	57	-29
J15 INTERPRET RESULTS OF CHEMICAL SAMPLE ANALYSES AND MAKE RECOMMENDATIONS	31	57	-26
J14 INTERPRET RESULTS OF AIR SAMPLE ANALYSES AND MAKE RECOMMENDATIONS	34	60	-26

TOTAL NUMBER OF TASKS EXCEEDING 10% DIFFERENCE: 182

NUMBER TASKS PERFORMED BY MORE 90750 PERSONNEL: 21

NUMBER TASKS PERFORMED BY MORE 90770 PERSONNEL: 161

TABLE 11

TASKS WHICH MOST CLEARLY DISTINGUISH BETWEEN DAFSC 90770 AND 90790 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 90770	DAFSC 90790	DIFFERENCE
J39 SCHEDULE HEARING LOSS PATIENTS FOR REPEAT AUDIOGRAMS	59	0	59
J22 ISSUE AND FIT PROTECTIVE EAR DEVICES	70	16	54
F8 INTERVIEW VENEREAL DISEASE PATIENTS	64	21	43
F13 MAINTAIN RECORDS FOR TUBERCULIN POSITIVES, CONVERTERS, CONTACTS, OR CASES	46	5	41
J11 DOCUMENT OCCUPATIONAL PHYSICAL EXAMINATIONS	40	0	40
G14 SURVEY ICEMAKING AND STORAGE FACILITIES	37	0	37
H1 COLLECT ICE SAMPLES FOR BACTERIOLOGICAL ANALYSES	41	5	36
E3 COLLECT AND ASSEMBLE INFORMATION FOR PART II OF THE AEROSPACE MEDICINE REPORT	69	37	32
H6 EVALUATE EFFICIENCY OF SANITARY SEWAGE TREATMENT OPERATIONS	30	0	30
A29 SERVE AS MEMBER OF HOSPITAL INFECTIONS CONTROL COMMITTEES	28	0	28
A1 CONDUCT STAFF MEETINGS OR BRIEFINGS	52	95	-43
D26 SERVE AS TRAINING ADVISOR OR TRAINING PROGRAM MONITOR	23	58	-35
C4 EVALUATE COMPLETED SPECIAL PROJECTS	46	79	-33
A25 PREPARE, RESEARCH, OR EDIT PROBLEM-SOLVING REPORTS SUCH AS STAFF SUMMARIES OR ONE-TIME REPORTS ON ITEMS OF INTEREST	49	79	-30
B15 REVIEW OR SIGN CIVILIAN PERFORMANCE RATINGS	9	32	-23
A18 PLAN OR DEVELOP SAFETY PROGRAMS	38	58	-20

TOTAL NUMBER OF TASKS EXCEEDING 10% DIFFERENCE: 181

NUMBER TASKS PERFORMED BY MORE 90770 PERSONNEL: 124

NUMBER TASKS PERFORMED BY MORE 90790 PERSONNEL: 57

ANALYSIS OF TASK DIFFICULTY

From a listing of airmen identified for this occupational survey, career ladder incumbents performing 7-skill level duty at various operational locations were selected to rate task difficulty. Tasks were rated on a nine-point scale ranging from extremely low to extremely high difficulty, with difficulty defined as the length of time it takes an average member to learn to do the task. Interrater reliability (as assessed by components of variance of mean ratings) among the 59 raters was .94. Ratings were adjusted so that tasks of average difficulty have ratings of 5.00.

Table 12 lists the 15 most difficult tasks performed by career ladder members. Seven of the top 15 most difficult tasks come under Duty N, Performing Bio-Environmental Support of Missile Operations. In fact, 11 tasks in this duty were rated well-above to extremely well-above average in difficulty.

The next most difficult tasks are those associated with interpreting air, dust, and chemical sample analyses and making recommendations. Tasks related to investigating or surveying actual or possible occupational health hazards stemming from noise, chemical, biological, or radiological sources are also extremely difficult, as well as managerial tasks associated with developing, recommending, and directing the implementation of methods and programs designed to control hazards or protect workers in hazardous areas. The next most difficult group of tasks in this career field are those associated with the plans, research, and procedural preparation of conducting projects and with the evaluation and reporting of routine and special projects, surveys, or investigations.

Of the 166 tasks rated above average in difficulty, 18 are performed by 50 percent or more of all 907X0 personnel, as shown in Table 13. Additionally, 42 more of these more difficult tasks are performed by 30-49 percent of all 907X0 personnel. An interesting feature reflected in Table 13 is that generally higher percentages of 7-skill level personnel perform these more difficult tasks than do 5-skill level personnel. Also reflected in Table 13 is the fact that 14 of the 18 most difficult tasks performed by high percentages of all 907X0 personnel are occupational health tasks rather than community health tasks.

Table 14 lists the least difficult tasks performed by career ladder respondents. Table 15 contains the 20 tasks that are below average in difficulty and which are performed by 60 percent or more of all 907X0 personnel. These tasks cover both the occupational and community health areas and include simpler functions such as performing illumination, temperature, humidity, base-service facility, and sanitation surveys; interviewing and documenting venereal disease cases; and performing general audiometric and associated hearing conservation functions. Another 61 of the 166 less difficult tasks in the career field

are performed by 30 to 59 percent of all 907X0 personnel. These represent a mixture of other more general or routine technical functions along with supervisory and training functions. It is also interesting to note that there is not a trend in these below average difficulty tasks whereby 5- or 7-skill level personnel generally perform the tasks more than or less than the other group. Rather, in some cases percentages performing are relatively the same for 5- and 7-skill level personnel, in some cases 5-skill level percentages are higher, and in some cases 7-skill level percentages are higher.

Job Difficulty Index (JDI)

Based on the difficulty ratings of tasks, the relative amount of time spent on the tasks performed, and the number of tasks performed, a job difficulty index (JDI) was computed for each incumbent in the survey sample. To obtain a job difficulty index for a group of individuals, such as a DAFSC group, job-type group, or cluster, the JDI of each individual in that group is added together; an average or "mean" JDI is then obtained by dividing the sum of the individual JDIs by the number of individuals in that group. Thus, the JDI for a work group is simply the average JDI of all members of that group.

The job difficulty values for all major groups of DAFSC 907X0 personnel considered in this analysis are contained in Table 16. Of the primary career ladder structure groups, the Environmental Health Cluster as a whole has a well above average difficulty job, but it should be noted that there is extreme variability among the job types within the cluster. Five of the eight job types (which happen also to be the larger ones, also) are above average in difficulty, while three are considerably below average in difficulty. Compared to cluster 1, the Personal Health Protection cluster is unbelievably low in their overall job difficulty. The most difficult job in the cluster, that performed by Personal Health Protection Analysts, is only as difficult as that of the lowest group in the Environmental Health Cluster. The two independent job types also have very low difficulty jobs.

TABLE 12

MOST DIFFICULT TASKS PERFORMED BY 907X0 PERSONNEL

TASKS	TASK DIFFICULTY	PERCENT PERFORMING
N11 PLOT HAZARDOUS CORRIDORS	7.48	3
N5 MONITOR MISSILE DECONTAMINATION OPERATIONS	7.12	2
L14 IDENTIFY AGENTS OF CHEMICAL WARFARE	7.06	24
K25 PERFORM RADIO FREQUENCY BASELINE SURVEYS	6.93	16
K16 IDENTIFY HAZARDS RESULTING FROM LASER OPERATION	6.93	6
N8 MONITOR PROPELLANT TRANSFER OPERATIONS	6.92	3
N6 MONITOR PROPELLANT HOLDING OPERATIONS	6.90	3
N1 DETERMINE AMOUNT OF NEUTRALIZERS NEEDED IN SPILL EMERGENCIES	6.85	7
N7 MONITOR PROPELLANT PUMP CHANGE OPERATIONS		
H15 PERFORM POLLUTION ABATEMENT STUDIES	6.82	15
J17 INVESTIGATE ENVIRONMENTAL DIFFERENTIAL PAY OCCUPATIONS	6.73	24
J16 INTERPRET RESULTS OF DUST SAMPLE ANALYSES AND MAKE RECOMMENDATIONS	6.72	33
N3 MONITOR DECONTAMINATION OPERATIONS OF MISSILE AUXILIARY EQUIPMENT	6.69	2
J14 INTERPRET RESULTS OF AIR SAMPLE ANALYSES AND MAKE RECOMMENDATIONS	6.66	42
J15 INTERPRET RESULTS OF CHEMICAL SAMPLE ANALYSES AND MAKE RECOMMENDATIONS	6.62	39

TABLE 13

TASKS RATED ABOVE AVERAGE IN DIFFICULTY WHICH ARE PERFORMED BY
50 PERCENT OR MORE OF ALL DAFSC 907X0 PERSONNEL

TASKS	DIFFICULTY INDEX	PERCENT MEMBERS PERFORMING		
		DAFSC 90750	DAFSC 90770	TOTAL SAMPLE
J10 DETERMINE AND RECOMMEND CONTROL METHODS TO PROTECT WORKERS FROM HAZARDS	6.50	54	70	59
J20 INVESTIGATE POSSIBLE CHEMICAL HEALTH HAZARDS	6.39	51	62	53
J18 INVESTIGATE OCCUPATIONAL DISEASE OR INJURY CASES	6.36	48	60	51
J30 PERFORM VENTILATION SURVEYS	6.21	68	66	66
J5 COLLECT AIR SAMPLES FROM INDUSTRIAL ENVIRONMENT	5.91	62	61	60
J25 MONITOR THE REQUISITION, ISSUE, OR USE OF SOLVENTS TO INSURE MEDICAL CONTROLS ARE MAINTAINED	5.82	46	67	51
J32 RECOMMEND CONTROLS FOR HAZARDOUS NOISE	5.79	54	68	57
J35 RESEARCH TEXTBOOKS, MANUALS, OR OTHER PUBLICATIONS TO IDENTIFY CHARACTERISTICS OF CONTAMINANTS	5.78	57	75	61
J6 COLLECT BREATHING ZONE AIR SAMPLES	5.71	59	57	56
A21 PREPARE, DEVELOP, OR REVISE PROCEDURAL GUIDELINES SUCH AS OPERATING INSTRUCTIONS (OI), OR CHECKLISTS	5.69	51	78	59
A10 DRAFT CORRESPONDENCE SUCH AS LETTERS, MESSAGES, OR MEMOS	5.67	83	97	87
C24 WRITE INSPECTION REPORTS	5.63	56	68	60
J44 SELECT OR CHECK CALIBRATION OF SAMPLING DEVICES USED IN DETECTING HAZARDOUS AGENTS	5.57	51	66	53
J1 BRIEF PERSONNEL ON OCCUPATIONAL OR ENVIRONMENTAL HEALTH HAZARDS	5.44	62	73	64
J8 COLLECT DATA ON EQUIPMENT, AIRCRAFT, OR OTHER OPERATIONS WHICH PRODUCE NOISE	5.32	58	54	55
J28 PERFORM NOISE SURVEYS	5.12	74	71	71
C1 COORDINATE WITH BIO-ENVIRONMENTAL ENGINEERS OR PUBLIC HEALTH OFFICERS ON OCCUPATIONAL HEALTH PROBLEM AREAS	5.03	64	81	68
J13 IDENTIFY HAZARDOUS NOISE AREAS	5.03	68	65	64

TABLE 14

LEAST DIFFICULT TASKS PERFORMED BY 907X0 PERSONNEL

TASKS	TASK DIFFICULTY	PERCENT PERFORMING
J39 SCHEDULE HEARING LOSS PATIENTS FOR REPEAT AUDIOGRAMS	3.18	60
F1 ADMINISTER TUBERCULIN SKIN TESTS	3.16	9
J22 ISSUE AND FIT PROTECTIVE EAR DEVICES	3.12	71
C16 INSPECT APPEARANCE OF PERSONNEL	3.06	38
B16 SCHEDULE EQUIPMENT REPAIRS	3.06	33
B6 DIRECT OR PARTICIPATE IN BASE OR SQUADRON DETAILS	2.97	64
G11 SURVEY CHEMICAL TOILETS	2.94	20
H18 SHIP WATER SAMPLES FOR CHEMICAL OR RADIOLOGICAL ANALYSES	2.93	51
K29 SHIP OR STORE DOSIMETER FILM	2.92	49
H13 PERFORM PH DETERMINATIONS	2.88	60
E5 COMPLETE DOSIMETRY DATA FORMS (AF FORM 1523)	2.77	47
E2 ANNOTATE TUBERCULIN SKIN TEST RESULTS ON INTERNATIONAL CERTIFICATE OF VACCINATION FORMS (PHS FORM 731)	2.76	28
E8 COMPLETE USAF RADIATION MONITORING PROGRAM REGISTRATION FORMS (AF FORM 1520)	2.71	49
H2 COLLECT POTABLE WATER SAMPLES FOR ANALYSES	2.67	60
E4 COMPLETE FLUORIDE/BACTERIOLOGICAL EXAMINATION OF WATER FORMS (DD FORM 686)	2.59	57
H1 COLLECT ICE SAMPLES FOR BACTERIOLOGICAL ANALYSES	2.59	53

TABLE 15

TASKS RATED BELOW AVERAGE IN DIFFICULTY WHICH ARE PERFORMED BY
60 PERCENT OR MORE OF ALL DAFSC 907X0 PERSONNEL

TASKS	DIFFICULTY INDEX	PERCENT MEMBERS PERFORMING		TOTAL SAMPLE
		DAFSC 90750	DAFSC 90770	
J33 RECOMMEND PERSONAL PROTECTIVE DEVICES	4.83	62	69	62
M2 CALIBRATE SURVEY EQUIPMENT	4.77	65	63	62
F8 INTERVIEW VENEREAL DISEASE PATIENTS	4.69	77	64	70
G20 WRITE REPORTS OF SANITARY SURVEYS OR INSPECTIONS	4.57	64	64	62
J27 PERFORM ILLUMINATION SURVEYS	4.45	74	69	70
J29 PERFORM TEMPERATURE AND HUMIDITY SURVEYS	4.30	68	63	64
K32 SURVEY MICROWAVE OVEN LEAKAGE	4.13	64	56	60
F3 COMPLETE VENEREAL DISEASE CASE REPORTS OR CONTACT REPORTS	4.12	71	59	64
A12 PARTICIPATE IN STAFF MEETINGS OR BRIEFINGS	4.03	47	86	60
J2 BRIEF PERSONNEL ON USE OF PROTECTIVE EAR DEVICES	3.92	84	79	79
C17 INSPECT FACILITIES OR WORK AREAS FOR CONDITION OR APPEARANCE	3.90	53	76	61
H8 PERFORM BACTERIOLOGICAL ANALYSES OF WATER BY MEMBRANE FILTER TECHNIQUE				
J26 PERFORM AUDIOMETRIC EXAMINATIONS	3.90	67	51	61
J4 CLASSIFY AUDIOGRAMS	3.67	64	61	60
G7 SURVEY BARBER OR BEAUTY SHOPS	3.63	67	58	60
J39 SCHEDULE HEARING LOSS PATIENTS FOR REPEAT AUDIOGRAMS	3.35	68	50	61
J22 ISSUE AND FIT PROTECTIVE EAR DEVICES	3.18	66	59	60
B6 DIRECT OR PARTICIPATE IN BASE OR SQUADRON DETAILS	3.12	75	70	71
H13 PERFORM PH DETERMINATIONS	2.97	63	68	64
H2 COLLECT POTABLE WATER SAMPLES FOR ANALYSES	2.88	66	51	60
	2.67	67	51	61

TABLE 16

JOB DIFFICULTY INDEX (JDI)* FOR FUNCTIONAL GROUPS OF AFS 907X0 PERSONNEL

CAREER LADDER STRUCTURE GROUPS	<u>JDI</u>
I. GENERAL ENVIRONMENTAL HEALTH PERSONNEL	14.5
ENVIRONMENTAL HEALTH SECTION SUPERVISORS	18.8
COMMUNITY AND PERSONAL HEALTH PERSONNEL	15.7
NCOIC, ENVIRONMENTAL HEALTH SERVICES	15.4
OCCUPATIONAL HEALTH SPECIALISTS	14.8
DISEASE AND INJURY RECORDS AND ANALYSIS PERSONNEL	13.2
TECHNICAL TRAINING INSTRUCTORS	11.5
INDUSTRIAL HYGIENE SPECIALISTS	11.0
ENVIRONMENTAL HEALTH SURVEY SPECIALISTS	8.5
II. PERSONAL HEALTH PROTECTION PERSONNEL	7.2
PERSONAL HEALTH PROTECTION ANALYSTS	8.5
COMMUNICABLE DISEASE CONTROL SPECIALISTS	5.7
HEARING CONSERVATION SPECIALISTS	4.0
IJT(A). WATER ANALYSIS AND SANITATION SURVEY SPECIALISTS	6.1
IJT(B). RADIOLOGICAL HEALTH PROTECTION PERSONNEL	10.9

* AVERAGE JDI FOR TOTAL SAMPLE IS 13.0

JOB SATISFACTION INDICATORS

Job interest, perceived utilization of talents and training, and reenlistment intentions for AFMS groups are presented in Table 17 along with comparative sample data compiled from all USAF career fields surveyed in 1977. The most striking finding is that 907X0 personnel from all AFMS groups in Table 17 find their jobs more interesting and feel their talents and training are better utilized than do the personnel from many other USAF career fields. Despite this favorable feeling about their jobs, however, higher percentages of 907X0 personnel in each enlistment group indicate they do not intend to reenlist than do personnel from other fields. These findings are not only consistent for AFMS groups of 907X0 personnel, but also for the functional job groups found in this analysis, as shown in Tables 18 and 19. From the data available in this study, it is not apparent why these personnel do not intend to reenlist even though they have highly favorable perceptions of their jobs. However, it appears from these findings that this probably should be an area of concern for career field managers.

TABLE 17

**JOB SATISFACTION INDICATORS AND REENLISTMENT INTENTIONS FOR FIRST ENLISTMENT,
SECOND ENLISTMENT AND CAREER AFMS GROUPS
(PERCENT MEMBERS RESPONDING)**

<u>SATISFACTION INDICATOR</u>	<u>FIRST ENLISTMENT (1-48 MONTHS AFMS)</u>		<u>SECOND ENLISTMENT (49-96 MONTHS AFMS)</u>		<u>CAREER AIRMEN (49-241+ MONTHS AFMS)</u>	
	<u>907X0 (N=147)</u>	<u>OTHER USAF FIELDS (N=147)</u>	<u>907X0 (N=122)</u>	<u>OTHER USAF FIELDS (N=122)</u>	<u>907X0 (N=191)</u>	<u>OTHER USAF FIELDS (N=191)</u>
I FIND MY JOB:						
DULL	3	16	2	13	2	9
SO-SO	4	19	3	16	1	10
INTERESTING	93	65	95	71	97	81
MY JOB UTILIZES MY TALENTS:						
NOT AT ALL OR VERY LITTLE	22	31	15	23	7	15
FAIRLY WELL OR BETTER	78	69	85	77	93	85
MY JOB UTILIZES MY TRAINING:						
NOT AT ALL OR VERY LITTLE	15	26	12	24	11	19
FAIRLY WELL OR BETTER	85	74	88	76	89	81
I PLAN TO REENLIST:						
NO, OR PROBABLY NO	63	59	43	35	27	27
YES, OR PROBABLY YES	37	41	57	65	73	73

TABLE 18

JOBS SATISFACTION INDICATORS AND REENLISTMENT INTENTIONS OF MEMBERS WITHIN FUNCTIONAL JOB GROUPS
(PERCENT MEMBERS RESPONDING)

CLUSTER I GENERAL HEALTH	JOB TYPES IN CLUSTER I						HEALTH MCOIC	TRAINING	HYGIENE
	SUPERVISORS	COMMUNITY HEALTH	DISEASE, AND ANALYSIS	HEALTH	HEALTH SURVEY				
I FIND MY JOB:									
DULL	6	8	1	0	2	9	0	0	0
SO-SO	6	1	7	20	9	10	5	0	0
INTERESTING	88	91	92	80	89	81	95	100	100
MY JOB UTILIZES MY TALENTS:									
NOT AT ALL OR VERY LITTLE	11	12	6	40	2	20	8	0	0
FAIRLY WELL OR BETTER	89	88	94	60	98	80	92	100	100
MY JOB UTILIZES MY TRAINING:									
NOT AT ALL OR VERY LITTLE	9	11	9	20	2	11	10	0	0
FAIRLY WELL OR BETTER	91	89	91	80	98	89	90	100	100
I PLAN TO REENLIST:									
NO, OR PROBABLY NO	41	28	41	40	46	50	44	50	22
YES, OR PROBABLY YES	59	72	59	60	54	50	56	50	78

TABLE 19

JOB SATISFACTION INDICATORS AND REENLISTMENT INTENTIONS OF MEMBERS WITHIN FUNCTIONAL JOB GROUPS
(PERCENT MEMBERS RESPONDING)

SATISFACTION INDICATOR	CLUSTER II		JOB TYPES IN CLUSTER II			INDEPENDENT JOB TYPES	
	PERSONAL HEALTH PROTECTION	PERSONAL HEALTH PROTECTION	COMMUNICABLE DISEASE CONTROL	PERSONAL HEALTH PROTECTION	HEARING CONSERVATION	WATER ANALYSIS AND SANITATION	RADIOLOGICAL HEALTH PROTECTION
I FIND MY JOB:							
NO RESPONSE	4		14	-	15	-	-
DULL	2		0	0	14	10	0
SO-SO	12		0	14	14	10	0
INTERESTING	82		86	86	57	80	100
MY JOB UTILIZES MY TALENTS:							
NOT AT ALL OR VERY LITTLE	26		0	25	43	38	38
FAIRLY WELL OR BETTER	74		100	75	57	62	62
MY JOB UTILIZES MY TRAINING:							
NOT AT ALL OR VERY LITTLE	14		14	14	14	17	38
FAIRLY WELL OR BETTER	86		86	86	86	83	62
I PLAN TO REENLIST:							
NO, OR PROBABLY NO	56		42	56	86	45	38
YES, OR PROBABLY YES	44		58	44	14	55	62

COMPARISON OF CURRENT SURVEY TO THE 1973 SURVEY

The results of this survey were compared to those of Occupational Survey Report AFPT 90-907-092, dated August 1973. Table 20 contains the respective career ladder structures from the 1973 OSR and the current study.

The most notable similarity between both structures concerns the two clusters that were identified in both studies. Some of the job functions performed by the Military Public Health Personnel (Cluster I in 1973) are identical to some of those performed by Personal Health Protection Personnel (Cluster II in 1978), namely the hearing conservation and communicable disease functions. However, members of the 1973 cluster as a whole performed water, waste disposal, and sanitation functions to a greater extent than do members of the 1978 cluster; in 1978, these water and sanitation functions are performed by a specialized independent job type. Conversely, members of the 1978 cluster perform job functions associated with screening, updating, and maintaining health records of personnel exposed to job hazards; in 1973, these same functions were performed by Forms and Records Specialists, which is a job type in Cluster II of the 1973 OSR.

In the same vein, the Occupational Health Personnel group (Cluster II in 1973) is very roughly similar to the General Environmental Health Personnel group (Cluster I in 1978) in terms of the job function they perform. The three job types identified in Cluster II of the 1973 OSR (see Table 18) are close in nature to the section supervisors, occupational health survey specialists, and disease and injury records analysis specialists, respectively, that were identified in the 1978 study. However, that is about all these two clusters have in common. In 1978, three functional groups identified as independent job types in 1973 are included in the current General Environmental Health cluster. The 1973 groups are Superintendents, Environmental Survey Specialists, and Instructors. The Community and Personal Health and the Industrial Hygiene job types identified in the 1978 study were not identified at all in the 1973 study. Likewise, Quarantine Inspectors, an independent job type in 1973, has disappeared in 1978. Quarantine inspection tasks are still being performed in 1978, but as a small part of the much broader jobs of the personnel involved in general environment health functions. The job functions performed by Bacteria Analysis Specialists (an independent job type in 1973) and Water and Waste Disposal personnel (a job type in the 1973 Cluster I), when combined, appear to be very similar to those functions performed by the 1978 Water Analysis and Sanitation Survey Specialists independent job type. Radiological health personnel were identified in both surveys as an independent job type.

To summarize the above, two clusters were found in the 1973 and in the 1978 studies. The clusters found in 1973 correlate very roughly to those found in 1978, with respect to some of the basic job functions performed. They do not correlate very well in terms of the job types

identified within the respective clusters. The independent job types identified in the two studies do not correlate well either. Three of the six independent job types found in 1973 correlate to three job types in the 1978 General Environmental Health cluster; one has disappeared completely in 1978; one (Radiological Health Personnel) has remained the same across years; and one (Bacteria Analysis Specialists) constitutes a significant part of one of the 1978 independent job types.

The similarity that is present in the 1978 study, the one that has drawn together job types previously more distinct in 1973, is the body of core tasks that are associated with occupational health functions, especially those dealing with noise control and hearing conservation. The 907X0 career field has been made more homogeneous by the great increase in emphasis that has been placed on protecting workers from occupational hazards, especially those associated with noise. Undoubtedly OSHA has played a significant role in producing these significant changes in the job patterns of 907X0 personnel that have occurred since 1973.

In summary, the 907X0 career ladder has changed substantially since it was last surveyed in 1973. While many or even most job functions performed in 1973 are still being performed in 1978, the clarity with which job type groups can be identified has been greatly increased. More importantly, the pattern or configuration of the job types has changed substantially, primarily as a result of the recent increased emphasis in protecting workers from occupational hazards.

TABLE 20

COMPARISON OF THE 1973 VS THE 1978 CAREER LADDER STRUCTURE

1978 STUDY (N=481)		PERCENT SAMPLE	1973 STUDY (N=359)	PERCENT SAMPLE
I.	GENERAL ENVIRONMENT HEALTH PERSONNEL	79	I. MILITARY PUBLIC HEALTH PERSONNEL	26
	ENVIRONMENTAL HEALTH SECTION SUPERVISORS	18	HEARING CONSERVATION	2
	COMMUNITY AND PERSONAL HEALTH PERSONNEL	22	COMMUNICABLE DISEASE	2
	DISEASE AND INJURY RECORDS ANALYSIS SPECIALISTS	1	WATER AND WASTE DISPOSAL	8
	OCCUPATIONAL HEALTH SURVEY SPECIALISTS	9		
	ENVIRONMENTAL HEALTH SURVEY SPECIALISTS	17		
	NCOIC, ENVIRONMENTAL HEALTH SERVICES	8		
	TECHNICAL TRAINING INSTRUCTORS	1		
	INDUSTRIAL HYGIENE SPECIALISTS	2		
II.	PERSONAL HEALTH PROTECTION PERSONNEL	9	II. OCCUPATIONAL HEALTH PERSONNEL	40
	COMMUNICABLE DISEASE CONTROL SPECIALISTS	1	NCOIC	5
	PERSONAL HEALTH PROTECTION ANALYSTS	6	SURVEY SPECIALISTS	5
	HEARING CONSERVATION SPECIALISTS	1	FORMS AND RECORDS SPECIALISTS	1
III.	INDEPENDENT JOB TYPES	8	III. INDEPENDENT JOB TYPES	16
	WATER ANALYSIS AND SANITATION SURVEY SPECIALISTS	6	SUPERINTENDENTS	4
	RADIOLOGICAL HEALTH PROTECTION PERSONNEL	2	RADIOLOGICAL HEALTH SPECIALISTS	2
			BACTERIA ANALYSIS SPECIALISTS	3
			ENVIRONMENTAL SURVEY SPECIALISTS	3
			QUARANTINE INSPECTORS	4
			INSTRUCTORS	1

APPENDIX A

CLUSTER I - GENERAL ENVIRONMENTAL HEALTH PERSONNEL (GRP018, 79% OF SAMPLE)

GENERAL DESCRIPTION

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	30
A PLANNING AND ORGANIZING	11
G PERFORMING ENVIRONMENTAL HEALTH SURVEYS	9
C INSPECTING AND EVALUATING	8
H MONITORING WATER, WASTE DISPOSAL, AND SEWAGE SYSTEMS	7
F PERFORMING EPIDEMIOLOGICAL FUNCTIONS	6
B DIRECTING AND IMPLEMENTING	6

GROUP CHARACTERISTIC TASKS:

A10 DRAFT CORRESPONDENCE SUCH AS LETTERS, MESSAGES, OR MEMOS
A14 PLAN INSPECTION PROCEDURES
C24 WRITE INSPECTION REPORTS
F8 INTERVIEW VENEREAL DISEASE PATIENTS
G2 COMPILE RESULTS OF SANITARY SURVEYS OR INSPECTIONS
G5 PERFORM SANITARY SURVEYS OF INDUSTRIAL, MEDICAL, OR ADMINISTRATIVE ACTIVITIES
G7 SURVEY BARBER OR BEAUTY SHOPS
G19 SURVEY SWIMMING POOLS OR BATHING AREAS
H8 PERFORM BACTERIOLOGICAL ANALYSES OF WATER BY MEMBRANE FILTER TECHNIQUE
J2 BRIEF PERSONNEL ON USE OF PROTECTIVE EAR DEVICES
J5 COLLECT AIR SAMPLES FROM INDUSTRIAL ENVIRONMENT
J6 COLLECT BREATHING ZONE AIR SAMPLES
J10 DETERMINE AND RECOMMEND CONTROL METHODS TO PROTECT WORKERS FROM HAZARDS
J13 IDENTIFY HAZARDOUS NOISE AREAS
J22 ISSUE AND FIT PROTECTIVE EAR DEVICES
J26 PERFORM AUDIOMETRIC EXAMINATIONS
J27 PERFORM ILLUMINATION SURVEYS
J28 PERFORM NOISE SURVEYS
J29 PERFORM TEMPERATURE AND HUMIDITY SURVEYS
J30 PERFORM VENTILATION SURVEYS
K7 CONDUCT OPERATIONAL CHECKS OF RADIATION DETECTION (RADIAC) EQUIPMENT
K22 ISSUE, COLLECT, OR EXCHANGE DOSIMETER FILM
K32 SURVEY MICROWAVE OVEN LEAKAGE
M2 CALIBRATE SURVEY EQUIPMENT

GROUP DIFFERENTIATING TASKS:

H7 EVALUATE DISINFECTION OF WATER SYSTEMS
H17 RECORD RESULTS OF CHEMICAL ANALYSES OF WATER
I26 MONITOR METHODS OF HANDLING, STORING, OR USING PESTICIDES
J9 COLLECT DUST SAMPLES FROM INDUSTRIAL ENVIRONMENT
J14 INTERPRET RESULTS OF AIR SAMPLE ANALYSES AND MAKE RECOMMENDATIONS
J15 INTERPRET RESULTS OF CHEMICAL SAMPLE ANALYSES AND MAKE RECOMMENDATIONS
J16 INTERPRET RESULTS OF DUST SAMPLE ANALYSES AND MAKE RECOMMENDATIONS
J20 INVESTIGATE POSSIBLE CHEMICAL HEALTH HAZARDS
J34 REQUISITION EQUIPMENT FOR SPECIAL ENVIRONMENTAL SURVEYS
J46 SURVEY DENTAL CLINICS FOR MERCURY VAPORS
J47 SURVEY FOR AIR POLLUTION SOURCES
J48 SURVEY HOSPITAL FOR OCCUPATIONAL HAZARDS
J49 SURVEY OPERATIONS TO DETERMINE SOURCES OF OCCUPATIONAL INJURIES OR DISEASES
K24 PERFORM LEAK TESTING OF SEALED RADIOLOGICAL SOURCES
M5 CONDUCT WATER POLLUTION SURVEYS

CLUSTER I - CONTINUED

SPECIAL DESCRIPTION

WORK AREA OR ACTIVITY:

COMMUNITY HEALTH	44%
DISASTER MEDICINE	26%
ENTOMOLOGY	22%
EPIDEMIOLOGY	29%
ENVIRONMENTAL LABORATORY	7%
ENVIRONMENTAL PROTECTION	30%
HEARING CONSERVATION	49%
INDUSTRIAL HYGIENE	76%
INSTRUCTION	5%
QUARANTINE	8%
MISSILE SUPPORT	8%
RADIOLOGICAL HEALTH	35%
WATER OR WASTE SURVEILLANCE	42%

ANIMALS COLLECTED:

NONE	40%
COCKROACHES	28%
LICE	22%
MOSQUITOES	59%
TICKS	22%

RADIATION EQUIPMENT USED:

NONE	3%
AN/PDR 27	94%
AN/PDR 43	58%
MICROWAVE SURVEYORS, MODEL 8100/8200	46%
FILM DOSIMETERS	79%
HOLADAY MICROWAVE METERS	69%
PAC 1S	84%

CHEM WARFARE DETECTION EQUIPMENT:

NONE	30%
M-18 A1 CHEMICAL DETECTOR	37%
WATER TEST KITS	54%

NOISE DETECTION EQUIPMENT:

NONE	2%
AUTOMATIC AUDIOMETERS	57%
IMPACT NOISE ANALYZERS	33%
NOISE EXPOS/DOSIMETERS	49%
OCTAVE BAND NOISE ANALYZERS	77%
SOUND LEVEL CALIBRATORS	86%
SOUND LEVEL METERS	91%

INDUSTRIAL SAMPLING EQUIPMENT:

NONE	3%
AIR SAMPLERS (BATTERY)	79%
AIR SAMPLERS (110V)	50%
BUBBLERS/IMPRINGERS	79%
CARBON MONOXIDE DETECTORS	88%
COMBUSTIBLE GAS INDICATORS	74%
ECOLYZERS	49%
EXPLOSIVE METERS	66%
HI VOLUME AIR SAMPLERS	76%
HYGROTHERMOGRAPHS	83%
LIGHT METERS	93%
MIDGET IMPRINGERS	77%
OXYGEN DEFICIENCY METERS	40%
PSYCHROMETERS	83%
ROTAMETERS	36%
UNIVERSAL TEST KITS	88%
VACUUM PUMPS	80%
VELOMETERS	88%

WATER TESTING EQUIPMENT:

NONE	13%
BACTERIOLOGICAL WATER KITS	74%
CHLORINE COMPARATORS	80%
DUAL RANGE INCUBATORS	30%
FLOURIDE TESTORS	68%
PH COMPARATORS	79%
WATER BATH INCUBATORS	36%

SEWAGE TESTING EQUIPMENT:

NONE	41%
HACH DO TEST KITS	31%

PEST CONTROL/SURVEY EQUIPMENT:

NONE	28%
LIGHT TRAPS	65%

PROTECTIVE EQUIPMENT:

NONE	10%
PROTECTIVE FACE EQUIPMENT	34%
PROTECTIVE CLOTHING	40%
RESPIRATORS	37%

MISCELLANEOUS EQUIPMENT:

NONE	5%
ANALYTICAL BALANCES	35%
CAMERAS (POLAROID)	61%
DIPPERS	40%
DRAFTING SETS	45%
FILTER ADAPTORS (8X10)	43%
MICROSCOPES	36%
PORTABLE GENERATORS	78%
PORTABLE TRANSMITTERS/RECEIVERS	45%
STOP WATCHES	75%
TRIPODS	64%

JOB TYPE - ENVIRONMENTAL HEALTH SECTION SUPERVISORS (GRP106, 18% OF SAMPLE)

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	24
A PLANNING AND ORGANIZING	15
C INSPECTING AND EVALUATING	11
B DIRECTING AND IMPLEMENTING	9
K CONDUCTING RADIOLOGICAL HEALTH PROGRAMS	7
D TRAINING	6
G PERFORMING ENVIRONMENTAL HEALTH SURVEYS	5
H MONITORING WATER, WASTE DISPOSAL, AND SEWAGE SYSTEMS	5

GROUP DIFFERENTIATING TASKS:

- A6 ESTABLISH LOCAL PROCEDURES FOR ENVIRONMENTAL HEALTH ACTIVITIES
- A7 ESTABLISH WORK PRIORITIES OR PERFORMANCE STANDARDS
- B4 COUNSEL SUBORDINATES ON CAREER PROGRESSION OF JOB PERFORMANCE
- B7 DIRECT SECTION WORK ACTIVITIES
- B10 INITIATE RECOGNITION FOR COMMENDABLE PERFORMANCE
- B12 PREPARE AIRMAN PERFORMANCE REPORTS (APR)
- B19 SUPERVISE ENVIRONMENTAL HEALTH SPECIALISTS (AFSC 90750)
- C5 EVALUATE COMPLIANCE OF SUBORDINATES WITH PERFORMANCE STANDARDS
- C7 EVALUATE ENVIRONMENTAL HEALTH SERVICES
- C12 EVALUATE PROGRESS OF SURVEYS ASSIGNED TO SUBORDINATES
- C16 INSPECT APPEARANCE OF PERSONNEL
- D7 CONDUCT OJT
- D10 COUNSEL TRAINEES ON TRAINING PROGRESS
- L1 BRIEF FIELD OFFICIALS ON POSSIBLE HEALTH HAZARDS
- L2 BRIEF FIELD OFFICIALS ON TYPES OF DECONTAMINATION REQUIRED

Description: This job type is composed of two smaller groups of 907X0 personnel who identify themselves as either NCOIC, Community Health or NCOIC, Industrial Hygiene. The primary commonality that led to their grouping lies with supervisory tasks; however, they also overlap substantially with respect to the broad range of technical tasks they perform. They perform the highest average number of tasks (179) of any job type group found, and also have the most difficult job overall (JDI= 18.8).

JOB TYPE - COMMUNITY AND PERSONAL HEALTH PERSONNEL (GRP098, 22% OF SAMPLE)

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	34
G PERFORMING ENVIRONMENTAL HEALTH SURVEYS	10
H MONITORING WATER, WASTE DISPOSAL, AND SEWAGE SYSTEMS	9
A PLANNING AND ORGANIZING	7
K CONDUCTING RADIOLOGICAL HEALTH PROGRAMS	7
F PERFORMING EPIDEMIOLOGICAL FUNCTIONS	7

GROUP DIFFERENTIATING TASKS:

- F8 INTERVIEW VENEREAL DISEASE PATIENTS
- G7 SURVEY BARBER OR BEAUTY SHOPS
- G9 SURVEY BASE NURSERIES OR CHILD CARE CENTERS
- G18 SURVEY RECREATION FACILITIES OR PLACES OF PUBLIC ASSEMBLY
- G19 SURVEY SWIMMING POOLS OR BATHING AREAS
- G20 WRITE REPORTS OF SANITARY SURVEYS OR INSPECTIONS
- H1 COLLECT ICE SAMPLES FOR BACTERIOLOGICAL ANALYSES
- H2 COLLECT POTABLE WATER SAMPLES FOR ANALYSES
- H8 PERFORM BACTERIOLOGICAL ANALYSES OF WATER BY MEMBRANE FILTER TECHNIQUE
- H13 PERFORM PH DETERMINATIONS
- H16 PERFORM TESTS TO DETERMINE FLOURIDE LEVELS IN WATERS
- H17 RECORD RESULTS OF CHEMICAL ANALYSES OF WATER
- I1 COLLECT OR IDENTIFY ADULT MOSQUITOES
- J4 CLASSIFY AUDIOGRAMS
- J22 ISSUE AND FIT PROTECTIVE EAR DEVICES
- J26 PERFORM AUDIOMETRIC EXAMINATIONS
- J27 PERFORM ILLUMINATION SURVEYS
- J28 PERFORM NOISE SURVEYS
- J29 PERFORM TEMPERATURE AND HUMIDITY SURVEYS
- K7 CONDUCT OPERATIONAL CHECKS OF RADIATION DETECTION (RADIAC) EQUIPMENT
- K22 ISSUE, COLLECT, OR EXCHANGE DOSIMETER FILM
- M5 CONDUCT WATER POLLUTION SURVEYS

Description: This group of primarily 5-skill level personnel performs almost the complete range of both community health and industrial hygiene tasks, and expends about equal job time (31 percent) on each area. From a technical standpoint, they are very similar to the Section Supervisors job type (GRP106); however, these personnel perform virtually no supervisory tasks. Compared to all other job types, these "non-specialists" perform a very high average number of tasks (127) and have a very difficult job (JDI= 15.7).

JOB TYPE - DISEASE AND INJURY RECORDS AND ANALYSIS PERSONNEL (GRP103, 1% OF SAMPLE)

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	18
F PERFORMING EPIDEMIOLOGICAL FUNCTIONS	17
A PLANNING AND ORGANIZING	14
G PERFORMING ENVIRONMENTAL HEALTH SURVEYS	8
I PERFORMING MEDICAL ENTOMOLOGICAL FUNCTIONS	8
H MONITORING WATER, WASTE DISPOSAL, AND SEWAGE SYSTEMS	8
K CONDUCTING RADIOLOGICAL HEALTH PROGRAMS	7

GROUP DIFFERENTIATING TASKS:

- A13 PERFORM ANALYSES OR SUMMARIES OF DATA TRENDS OR STATISTICS
- A23 PREPARE OR WRITE RECURRING REPORTS SUCH AS STATISTICAL, TRENDS, STATUS, OR HISTORICAL REPORTS
- E8 COMPLETE USAF RADIATION MONITORING PROGRAM REGISTRATION FORMS (AF FORM 1520)
- F2 COLLECT AND COMPILE EPIDEMIOLOGICAL DATA ON SPECIFIC DISEASES
- F3 COMPLETE VENEREAL DISEASE CASE REPORTS OF CONTACT REPORTS
- F4 COMPUTE RATES AND RATIOS SUCH AS HOSPITAL ADMISSION, DISEASE INCIDENCE, OR NON-EFFECTIVENESS
- F5 COORDINATE WITH LOCAL PUBLIC HEALTH SERVICE ON COMMUNICABLE DISEASE CASES OR CONTACTS
- F9 INVESTIGATE COMMUNICABLE DISEASE CASES
- F12 MAINTAIN BIO-STATISTICAL DATA INCLUDING CHARTS AND GRAPHS
- F13 MAINTAIN RECORDS FOR TUBERCULIN POSITIVES, CONVERTERS, CONTACTS, OR CASES
- H8 PERFORM BACTERIOLOGICAL ANALYSES OF WATER BY MEMBRANE FILTER TECHNIQUE
- H12 PERFORM ORTHOTOLODINE ARSENITE CHLORINE DETERMINATIONS
- I19 MAKE RECOMMENDATIONS FOR CONTROL OF BIRDS
- I21 MAKE RECOMMENDATIONS FOR CONTROL OF RODENTS
- J4 CLASSIFY AUDIOGRAMS
- J26 PERFORM AUDIOMETRIC EXAMINATIONS
- J38 REVIEW REPORT OF INJURY FORMS

Description: While the members of this very small job-type group perform a relatively broad range of community health and industrial hygiene tasks, they stand out as specialists in the area of collection, compilation, and statistical analysis of primarily epidemiological data. Hearing conservation tasks are also performed by high percentages of these personnel, along with some routine survey tasks in the community health duty area.

JOB TYPE - OCCUPATIONAL HEALTH SPECIALISTS (GRP072, 9% OF SAMPLE)

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	52
K CONDUCTING RADIOLOGICAL HEALTH PROGRAMS	9
A PLANNING AND ORGANIZING	9
C INSPECTING AND EVALUATING	8

GROUP DIFFERENTIATING TASKS:

C24 WRITE INSPECTION REPORTS
 J1 BRIEF PERSONNEL ON OCCUPATIONAL OR ENVIRONMENTAL HEALTH HAZARDS
 J3 BRIEF PERSONNEL ON USE OF PROTECTIVE DEVICES OTHER THAN EAR DEVICES
 J7 COLLECT CHEMICAL SAMPLES FROM INDUSTRIAL ENVIRONMENT
 J8 COLLECT DATA ON EQUIPMENT, AIRCRAFT, OR OTHER OPERATIONS WHICH PRODUCE NOISE
 J13 IDENTIFY HAZARDOUS NOISE AREAS
 J14 INTERPRET RESULTS OF AIR SAMPLE ANALYSES AND MAKE RECOMMENDATIONS
 J18 INVESTIGATE OCCUPATIONAL DISEASE OR INJURY CASES
 J20 INVESTIGATE POSSIBLE BIOLOGICAL HEALTH HAZARDS
 J27 PERFORM ILLUMINATION SURVEYS
 J28 PERFORM NOISE SURVEYS
 J49 SURVEY OPERATIONS TO DETERMINE SOURCES OF OCCUPATIONAL INJURIES OR DISEASE
 K7 CONDUCT OPERATIONAL CHECKS OF RADIATION DETECTION (RADIAC) EQUIPMENT
 K21 INSPECT SOURCES OF IONIZING RADIATION
 K31 SURVEY HANDLING, STORAGE, RECEIPT, OR SHIPMENT OF RADIOACTIVE MATERIALS
 M2 CALIBRATE SURVEY EQUIPMENT

Description: Comprised of primarily 5-skill level personnel, this group spends over 50 percent of its job time conducting occupational health programs (Duty J). High percentages of these group members perform the full spectrum of routine industrial survey tasks, including routine radiological health protection tasks. In addition, generally 30 to 60 percent of them perform routine community health surveys and related tasks. However, despite the high time spent in the industrial health area, generally less than 50 percent of this group perform hearing conservation tasks.

JOB TYPE - ENVIRONMENTAL HEALTH SURVEY SPECIALISTS (GRP039, 17% OF SAMPLE)

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	26
G PERFORMING ENVIRONMENTAL HEALTH SURVEYS	17
H MONITORING WATER, WASTE DISPOSAL, AND SEWAGE SYSTEMS	14
F PERFORMING EPIDEMIOLOGICAL FUNCTIONS	9
K CONDUCTING RADIOLOGICAL HEALTH PROGRAMS	7
E MAINTAINING FORMS, RECORDS, AND PUBLICATIONS	6

GROUP DIFFERENTIATING TASKS:

- F8 INTERVIEW VENEREAL DISEASE PATIENTS
- G2 COMPILE RESULTS OF SANITARY SURVEYS OR INSPECTIONS
- G5 PERFORM SANITARY SURVEYS OF INDUSTRIAL, MEDICAL, OR ADMINISTRATIVE ACTIVITIES
- G7 SURVEY BARBER OR BEAUTY SHOPS
- G8 SURVEY BARRACKS, DORMITORIES, BACHELOR OFFICER'S QUARTERS (BOQS), GUEST HOUSING, OR TRANSIENT QUARTERS
- G9 SURVEY BASE NURSERIES OR CHILD CARE CENTERS
- G14 SURVEY ICEMAKING AND STORAGE FACILITIES
- G18 SURVEY RECREATION FACILITIES OR PLACES OF PUBLIC ASSEMBLY
- G19 SURVEY SWIMMING POOLS OR BATHING AREAS
- G20 WRITE REPORTS OF SANITARY SURVEYS OR INSPECTIONS
- H2 COLLECT POTABLE WATER SAMPLES FOR ANALYSES
- H8 PERFORM BACTERIOLOGICAL ANALYSES OF WATER BY MEMBRANE FILTER TECHNIQUE
- H12 PERFORM ORTHOTOLODINE ARSENITE CHLORINE DETERMINATIONS
- H13 PERFORM PH DETERMINATIONS
- H16 PERFORM TESTS TO DETERMINE FLUORIDE LEVELS IN WATERS
- I1 COLLECT OR IDENTIFY ADULT MOSQUITOES
- J27 PERFORM ILLUMINATION SURVEYS
- J28 PERFORM NOISE SURVEYS
- J29 PERFORM TEMPERATURE AND HUMIDITY SURVEYS
- K32 SURVEY MICROWAVE OVEN LEAKAGE
- M2 CALIBRATE SURVEY EQUIPMENT

Description: This relatively large job-type group is composed of primarily 5-skill level personnel who perform a very low average number of tasks (64). Overall their job, which consists primarily of performing routine community health surveys and related tasks, is much below average in difficulty (JDI= 8.5). Approximately 70 percent of these personnel also perform hearing conservation tasks but perform few other industrial hygiene type tasks or duties.

JOB TYPE - NCOIC, ENVIRONMENTAL HEALTH SERVICES (GRP040, 8% OF SAMPLE)

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
A PLANNING AND ORGANIZING	27
C INSPECTING AND EVALUATING	17
B DIRECTING AND IMPLEMENTING	16
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	13
D TRAINING	8

GROUP DIFFERENTIATING TASKS:

- A1 CONDUCT STAFF MEETINGS OR BRIEFINGS
- A3 DETERMINE REQUIREMENTS FOR PERSONNEL, MATERIAL, OR MONEY
- A6 ESTABLISH LOCAL PROCEDURES FOR ENVIRONMENTAL HEALTH ACTIVITIES
- A7 ESTABLISH WORK PRIORITIES OR PERFORMANCE STANDARDS
- A12 PARTICIPATE IN STAFF MEETINGS OR BRIEFINGS
- A21 PREPARE, DEVELOP, OR REVISE PROCEDURAL GUIDELINES SUCH AS OPERATING INSTRUCTIONS (OI), OR CHECKLISTS
- A30 SERVE ON AEROSPACE MEDICAL COUNCILS
- A34 WRITE JUSTIFICATIONS FOR PROCUREMENT OF EQUIPMENT, SUPPLIES, OR WORK AREAS
- B1 ASSIGN PERSONNEL TO DUTY POSITIONS
- B12 PREPARE AIRMAN PERFORMANCE REPORTS (APR)
- B19 SUPERVISE ENVIRONMENTAL HEALTH SPECIALISTS (AFSC 90750)
- B21 SUPERVISE ENVIRONMENTAL HEALTH TECHNICIANS (AFSC 90770)
- C5 EVALUATE COMPLIANCE OF SUBORDINATES WITH PERFORMANCE STANDARDS
- C10 EVALUATE LOCAL DIRECTIVES OR OPERATING PROCEDURES
- C12 EVALUATE PROGRESS OF SURVEYS ASSIGNED TO SUBORDINATES
- C23 REVIEW OR EVALUATE INSPECTION REPORTS
- D19 MAINTAIN TRAINING RECORDS SUCH AS ON-THE-JOB TRAINING RECORDS FORMS (AF FORM 623)
- E3 COLLECT AND ASSEMBLE INFORMATION FOR PART II OF THE AEROSPACE MEDICINE REPORT

Description: Eight percent of the survey respondents perform the primarily managerial and supervisory tasks that characterize this job type. Unlike the Section Supervisor job type (GRP106), this group characteristically performs very few technical tasks, although 30 to 50 percent of them perform some tasks related to noise control and hearing conservation. Most of the other technical tasks performed are done by lower percentages of this group, and are generally very difficult tasks such as investigating chemical health hazards and interpreting results of chemical analyses and making recommendations. Primarily, however, these almost exclusively 7- and 9-skill level personnel are managers and supervisors, not technicians.

JOB TYPE - TECHNICAL TRAINING INSTRUCTORS (GRP047, 1% OF SAMPLE)

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
D TRAINING	38
A PLANNING AND ORGANIZING	15
B DIRECTING AND IMPLEMENTING	13
C INSPECTING AND EVALUATING	9
G PERFORMING ENVIRONMENTAL HEALTH SURVEYS	8
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	6

GROUP DIFFERENTIATING TASKS:

- A7 ESTABLISH WORK PRIORITIES OR PERFORMANCE STANDARDS
- B2 CLARIFY POLICIES, DIRECTIVE, OR PROCEDURES FOR NEWLY ASSIGNED PERSONNEL
- B7 DIRECT SECTION WORK ACTIVITIES
- D1 ADMINISTER OR SCORE TESTS
- D5 CONDUCT SPECIALIZED TRAINING ON ENVIRONMENTAL HAZARDS
- D8 CONDUCT RESIDENT COURSE CLASSROOM TRAINING
- D11 DETERMINE OR EVALUATE TRAINING REQUIREMENTS
- D12 DEVELOP, ASSEMBLE, OR CONSTRUCT TRAINING AIDS
- D15 DEVELOP TESTS
- D17 EVALUATE TRAINING MATERIALS
- D18 EVALUATE TRAINING PROGRAMS, METHODS, OR TECHNIQUES
- D22 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT
- D24 REVIEW OR EVALUATE PROGRESS OF TRAINEES
- D25 SCHEDULE TRAINING SESSIONS
- D26 SERVE AS TRAINING ADVISOR OR TRAINING PROGRAM MONITOR
- J44 SELECT OR CHECK CALIBRATION OF SAMPLING DEVICES USED IN DETECTING HAZARDOUS AGENTS
- J45 SELECT OR FIT RESPIRATORY PROTECTIVE DEVICES
- K6 COMPUTE RADIATION INTENSITY PROBLEMS

Description: All members of this small group are 7- or 9-skill level, have a T-Prefix, and are assigned to the Brooks AFB School of Aerospace Medicine. Over 38 percent of their job time is spent training (Duty D), and another 37 percent performing tasks related to functions in support of training. Some routine industrial hygiene and community health tasks are also performed, but most likely they, too, are in support of classroom training.

JOB TYPE - INDUSTRIAL HYGIENE SPECIALISTS (GRP073, 2% OF SAMPLE)

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	63
A PLANNING AND ORGANIZING	7
C INSPECTING AND EVALUATING	5
K CONDUCTING RADIOLOGICAL HEALTH PROGRAMS	4

GROUP DIFFERENTIATING TASKS:

- C1 COORDINATE WITH BIO-ENVIRONMENTAL ENGINEERS OR PUBLIC HEALTH OFFICERS ON OCCUPATIONAL HEALTH PROBLEM AREAS
- C24 WRITE INSPECTION REPORTS
- J1 BRIEF PERSONNEL ON OCCUPATIONAL OR ENVIRONMENTAL HEALTH HAZARDS
- J2 BRIEF PERSONNEL ON USE OF PROTECTIVE EAR DEVICES
- J3 BRIEF PERSONNEL ON USE OF PROTECTIVE DEVICES OTHER THAN EAR DEVICES
- J5 COLLECT AIR SAMPLES FROM INDUSTRIAL ENVIRONMENT
- J6 COLLECT BREATHING ZONE AIR SAMPLES
- J8 COLLECT DATA ON EQUIPMENT, AIRCRAFT, OR OTHER OPERATIONS WHICH PRODUCE NOISE
- J10 DETERMINE AND RECOMMEND CONTROL METHODS TO PROTECT WORKERS FROM HAZARDS
- J13 IDENTIFY HAZARDOUS NOISE AREAS
- J20 INVESTIGATE POSSIBLE CHEMICAL HEALTH HAZARDS
- J24 MONITOR THE PROPER USE OF PERSONAL PROTECTIVE DEVICES
- J27 PERFORM ILLUMINATION SURVEYS
- J28 PERFORM NOISE SURVEYS
- J29 PERFORM TEMPERATURE AND HUMIDITY SURVEYS
- J30 PERFORM VENTILATION SURVEYS
- J32 RECOMMEND CONTROLS FOR HAZARDOUS NOISE
- J33 RECOMMEND PERSONAL PROTECTIVE DEVICES

Description: This is a highly specialized group of exclusively 5- and 7-skill level personnel who spend over 65 percent of their job time performing industrial hygiene tasks. The most distinguishing characteristic of this group is the amount of time spent on investigating occupational hazards, briefing personnel, and insuring the use of personal protective devices in hazardous occupational settings.

CLUSTER II - PERSONAL HEALTH PROTECTION PERSONNEL (GRP019, 9% OF SAMPLE)

GENERAL DESCRIPTION

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	34
F PERFORMING EPIDEMIOLOGICAL FUNCTIONS	26
A PLANNING AND ORGANIZING	12
E MAINTAINING FORMS, RECORDS, AND PUBLICATIONS	7
B DIRECTING AND IMPLEMENTING	5

GROUP CHARACTERISTIC (AND DIFFERENTIATING) TASKS:

- A2 DESIGN OR DEVELOP INFORMATION CHARTS, STATUS BOARDS, GRAPHS, OR SPOT MAPS
- E1 ANNOTATE HEALTH RECORD - SYPHILLIS RECORD FORMS (SF 602)
- E2 ANNOTATE TUBERCULIN SKIN TEST RESULTS ON INTERNATIONAL CERTIFICATE OF VACCINATION FORMS (PHS FORM 731)
- F2 COLLECT AND COMPILE EPIDEMIOLOGICAL DATA ON SPECIFIC DISEASES
- F3 COMPLETE VENEREAL DISEASE CASE REPORTS OR CONTACT REPORTS
- F4 COMPUTE RATES AND RATIOS SUCH AS HOSPITAL ADMISSION, DISEASE INCIDENCE, OR NON-EFFECTIVENESS
- F5 COORDINATE WITH LOCAL PUBLIC HEALTH SERVICE ON COMMUNICABLE DISEASE CASES OR CONTACTS
- F8 INTERVIEW VENEREAL DISEASE PATIENTS
- F9 INVESTIGATE COMMUNICABLE DISEASE CASES
- F12 MAINTAIN BIO-STATISTICAL DATA INCLUDING CHARTS AND GRAPHS
- F13 MAINTAIN RECORDS FOR TUBERCULIN POSITIVES, CONVERTERS, CONTACTS, OR CASES
- F17 SCHEDULE FOLLOW-UP VISITS OF TUBERCULIN POSITIVE REACTORS, CONVERTERS, CONTACTS, OR CASES
- F18 SCHEDULE FOLLOW-UP VISITS OF VENEREAL DISEASE PATIENTS, CONTACTS, OR SUSPECTS
- J1 BRIEF PERSONNEL ON OCCUPATIONAL OR ENVIRONMENTAL HEALTH HAZARDS
- J2 BRIEF PERSONNEL ON USE OF PROTECTIVE EAR DEVICES
- J4 CLASSIFY AUDIOGRAMS
- J11 DOCUMENT OCCUPATIONAL PHYSICAL EXAMINATIONS
- J22 ISSUE AND FIT PROTECTIVE EAR DEVICES
- J26 PERFORM AUDIOMETRIC EXAMINATIONS
- J31 PREPARE CONSULTATION SHEETS AND SCHEDULE HEARING LOSS PATIENTS TO DIAGNOSTIC HEARING CENTERS
- J36 REVIEW, EVALUATE, OR CLASSIFY RESULTS OF COMPLETED AUDIOMETRIC EXAMINATIONS
- J39 SCHEDULE HEARING LOSS PATIENTS FOR REPEAT AUDIOGRAMS
- J40 SCREEN AUDIOGRAM RECORDS TO DETERMINE IF THERE IS HEARING LOSS
- J41 SCREEN BASELINE OR TERMINATION PHYSICAL EXAMINATIONS OF PERSONNEL EXPOSED TO OCCUPATIONAL HAZARDS
- J42 SCREEN OCCUPATIONAL PHYSICAL EXAMINATIONS OF PERSONNEL EXPOSED TO OCCUPATIONAL HAZARDS

CLUSTER II - CONTINUED

SPECIAL DESCRIPTION

WORK AREA OR ACTIVITY:

COMMUNITY HEALTH	58%
DISASTER MEDICINE	16%
ENTOMOLOGY	12%
EPIDEMIOLOGY	54%
HEARING CONSERVATION	81%
INDUSTRIAL HYGIENE	30%
RADIOLOGICAL HEALTH	19%
WATER OR WASTE SURVEILLANCE	12%

ANIMALS COLLECTED:

NONE	58%
MOSQUITOES	30%

RADIATION EQUIPMENT USED:

NONE	42%
AN/DPR 27	60%
AN/DPR 43	28%
MICROWAVE SURVEYORS, MODEL 8100/8200	35%
FILM DOSIMETERS	54%
PAC 1S	54%

CHEMICAL WARFARE DETECTION EQUIPMENT:

NONE	58%
------	-----

NOISE DETECTION EQUIPMENT:

NONE	26%
AUTOMATIC AUDIOMETERS	51%
MANUAL AUDIOMETERS	61%
OCTAVE BAND NOISE ANALYZERS	40%
SOUND LEVEL CALIBRATORS	47%
SOUND LEVEL METERS	47%

INDUSTRIAL SAMPLING EQUIPMENT:

NONE	54%
AIR SAMPLERS (BATTERY)	30%
CARBON MONOXIDE DETECTORS	40%
LIGHT METERS	44%
PSYCHROMETERS	33%
UNIVERSAL TEST KITS	30%
VELOMETERS	33%

WATER TESTING EQUIPMENT:

NONE	56%
BACTERIOLOGICAL WATER KITS	33%
CHLORINE COMPARATORS	37%

SEWAGE TESTING EQUIPMENT:

NONE	65%
------	-----

PEST CONTROL/SURVEY EQUIPMENT:

NONE	65%
LIGHT TRAPS	33%

PROTECTIVE EQUIPMENT:

NONE	63%
------	-----

MISCELLANEOUS EQUIPMENT:

NONE	37%
CALCULATORS	44%
PORTABLE GENERATORS	35%

JOB TYPE - COMMUNICABLE DISEASE CONTROL SPECIALISTS (GRP069, 1% OF SAMPLE)

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
F PERFORMING EPIDEMIOLOGICAL FUNCTIONS	58
A PLANNING AND ORGANIZING	16
E MAINTAINING FORMS, RECORDS, AND PUBLICATIONS	6
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	5

GROUP DIFFERENTIATING TASKS:

- A2 DESIGN OR DEVELOP INFORMATION CHARTS, STATUS BOARDS, GRAPHS, OR SPOT MAPS
- F2 COLLECT AND COMPILE EPIDEMIOLOGICAL DATA ON SPECIFIC DISEASES
- F3 COMPLETE VENEREAL DISEASE CASE REPORTS OR CONTACT REPORTS
- F4 COMPUTE RATES AND RATIOS SUCH AS HOSPITAL ADMISSION, DISEASE INCIDENCE, OR NON-EFFECTIVENESS
- F5 COORDINATE WITH LOCAL PUBLIC HEALTH SERVICE ON COMMUNICABLE DISEASE CASES OR CONTACTS
- F7 DIRECT ADMINISTRATION OF TUBERCULIN SKIN TESTS
- F8 INTERVIEW VENEREAL DISEASE PATIENTS
- F9 INVESTIGATE COMMUNICABLE DISEASE CASES
- F12 MAINTAIN BIO-STATISTICAL DATA INCLUDING CHARTS AND GRAPHS
- F13 MAINTAIN RECORDS FOR TUBERCULIN POSITIVES, CONVERTERS, CONTACTS, OR CASES
- F14 MAKE RECOMMENDATIONS FOR DISEASE PREVENTION AND CONTROL
- F16 REVIEW REPORTS OF QUARANTINABLE DISEASES SUCH AS MORBIDITY AND MORTALITY WEEKLY REPORTS
- F18 SCHEDULE FOLLOW UP VISITS OF VENEREAL DISEASE PATIENTS, CONTACTS, OR SUSPECTS

Description: Members of this job type perform an average of only 26 tasks and perform a very-much-below average difficulty job (JDI= 5.7). In fact, 58 percent of their job time is spent performing only 15 tasks. As indicated by the above tasks, these members specialize in communicable disease monitoring and control functions. Other than several hearing conservation tasks, these members perform no other industrial hygiene tasks at all. Their community health functions are restricted solely to communicable disease control. Eighty-six percent are 5-skill level personnel, and the group as a whole has an average of only 1.4 years in the career field.

JOB TYPE - PERSONAL HEALTH PROTECTION ANALYSTS (GRP054, 6% OF SAMPLE)

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	34
F PERFORMING EPIDEMIOLOGICAL FUNCTIONS	23
A PLANNING AND ORGANIZING	13
E MAINTAINING FORMS, RECORDS, AND PUBLICATIONS	6
B DIRECTING AND IMPLEMENTING	6

GROUP DIFFERENTIATING TASKS:

- F3 COMPLETE VENEREAL DISEASE CASE REPORTS OR CONTACT REPORTS
- F4 COMPUTE RATES AND RATIOS SUCH AS HOSPITAL ADMISSION, DISEASE INCIDENCE, OR NON-EFFECTIVENESS
- F5 COORDINATE WITH LOCAL PUBLIC HEALTH SERVICE ON COMMUNICABLE DISEASE CASES OR CONTACTS
- F8 INTERVIEW VENEREAL DISEASE PATIENTS
- F9 INVESTIGATE COMMUNICABLE DISEASE CASES
- F12 MAINTAIN BIO-STATISTICAL DATA INCLUDING CHARTS AND GRAPHS
- F13 MAINTAIN RECORDS FOR TUBERCULIN POSITIVES, CONVERTERS, CONTACTS, OR CASES
- F15 REVIEW IMMUNIZATION PROGRAMS
- F16 REVIEW REPORTS OF QUARANTINABLE DISEASES SUCH AS MORBIDITY AND MORTALITY WEEKLY REPORTS
- J2 BRIEF PERSONNEL ON USE OF PROTECTIVE EAR DEVICES
- J4 CLASSIFY AUDIOGRAMS
- J11 DOCUMENT OCCUPATIONAL PHYSICAL EXAMINATIONS
- J18 INVESTIGATE OCCUPATIONAL DISEASE OR INJURY CASES
- J31 PREPARE CONSULTATION SHEETS AND SCHEDULE HEARING LOSS PATIENTS TO DIAGNOSTIC HEARING CENTERS
- J36 REVIEW, EVALUATE, OR CLASSIFY RESULTS OF COMPLETED AUDIOMETRIC EXAMINATIONS
- J40 SCREEN AUDIOGRAM RECORDS TO DETERMINE IF THERE IS HEARING LOSS
- J41 SCREEN BASELINE OR TERMINATION PHYSICAL EXAMINATIONS OF PERSONNEL EXPOSED TO OCCUPATIONAL HAZARDS
- J42 SCREEN OCCUPATIONAL PHYSICAL EXAMINATIONS OF PERSONNEL EXPOSED TO OCCUPATIONAL HAZARDS
- J43 SCREEN PRE-EMPLOYMENT PHYSICAL EXAMINATIONS OF PERSONNEL EXPOSED TO OCCUPATIONAL HAZARDS

Description: Almost all the technical tasks performed by 40 percent or more of this group relate to communicable disease detection, prevention, reporting, and statistical analysis; to hearing conservation functions; and to physical examination functions associated with personnel exposed to occupational hazards. Members of this group are predominantly 5- and 7-skill level and perform an average of 52 tasks which constitutes a job of well-below average difficulty (JDI= 8.5), even though they have an average of 4.5 years in the career field.

JOB TYPE - HEARING CONSERVATION SPECIALISTS (GRP043, 1% OF SAMPLE)

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
J CONDUCTING OCCUPATIONAL HEALTH PROGRAMS	63
G PERFORMING ENVIRONMENTAL HEALTH SURVEYS	7
A PLANNING AND ORGANIZING	6
F PERFORMING EPIDEMIOLOGICAL FUNCTIONS	5

GROUP DIFFERENTIATING TASKS:

J2 BRIEF PERSONNEL ON USE OF PROTECTIVE EAR DEVICES
 J4 CLASSIFY AUDIOGRAMS
 J11 DOCUMENT OCCUPATIONAL PHYSICAL EXAMINATIONS
 J22 ISSUE AND FIT PROTECTIVE EAR DEVICES
 J26 PERFORM AUDIOMETRIC EXAMINATIONS
 J31 PREPARE CONSULTATION SHEETS AND SCHEDULE HEARING LOSS PATIENTS TO DIAGNOSTIC HEARING CENTERS
 J33 RECOMMEND PERSONAL PROTECTIVE DEVICES
 J36 REVIEW, EVALUATE, OR CLASSIFY RESULTS OF COMPLETED AUDIOMETRIC EXAMINATIONS
 J39 SCHEDULE HEARING LOSS PATIENTS FOR REPEAT AUDIOGRAMS
 J40 SCREEN AUDIOGRAM RECORDS TO DETERMINE IF THERE IS HEARING LOSS

Description: Members of this job type are primarily 5-skill level personnel who have an average of only 1.7 years in the career field. Fifty-seven percent of their job time is spent performing only 11 tasks, almost all of which are directly related to hearing conservation. As a whole, they perform a very limited variety of other tasks; most of these are community health-type tasks. All tasks performed range from average to very much below average in difficulty, and thus this group's job difficulty is very-much-below average (JDI= 4.0).

INDEPENDENT JOB TYPE (A) - WATER ANALYSIS AND SANITATION SURVEY SPECIALISTS
(GRP020, 6% OF SAMPLE)

GENERAL DESCRIPTION

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
H MONITORING WATER, WASTE DISPOSAL, AND SEWAGE SYSTEMS	34
G PERFORMING ENVIRONMENTAL HEALTH SURVEYS	22
A PLANNING AND ORGANIZING	9
I PERFORMING MEDICAL ENTOMOLOGICAL FUNCTIONS	7
C INSPECTING AND EVALUATING	6

GROUP DIFFERENTIATING TASKS:

- A13 PERFORM ANALYSES OR SUMMARIES OF DATA TRENDS OR STATISTICS
- E4 COMPLETE FLUORIDE/BACTERIOLOGICAL EXAMINATION OF WATER FORMS (DD FORM 686)
- G1 COLLECT AIR, WATER, OR SURFACE SAMPLES IN HOSPITALS FOR SEPSIS CONTROL PROGRAMS
- G2 COMPILE RESULTS OF SANITARY SURVEYS OR INSPECTIONS
- G5 PERFORM SANITARY SURVEYS OF INDUSTRIAL, MEDICAL OR ADMINISTRATIVE ACTIVITIES
- G7 SURVEY BARBER OR BEAUTY SHOPS
- G9 SURVEY BASE NURSERIES OR CHILD CARE CENTERS
- G13 SURVEY GARBAGE AND REFUSE DISPOSAL FACILITIES
- G15 SURVEY NAVIGABLE STREAMS FOR POLLUTION EMISSION
- G19 SURVEY SWIMMING POOLS OR BATHING AREAS
- G20 WRITE REPORTS OF SANITARY SURVEYS OR INSPECTIONS
- H1 COLLECT ICE SAMPLES FOR BACTERIOLOGICAL ANALYSES
- H2 COLLECT POTABLE WATER SAMPLES FOR ANALYSES
- H3 COLLECT WASTE WATER SAMPLES FOR ANALYSES
- H6 EVALUATE EFFICIENCY OF SANITARY SEWAGE TREATMENT OPERATIONS
- H10 PERFORM CHEMICAL TESTS ON SEWAGE SUCH AS DISSOLVED OXYGEN, BIO-CHEMICAL OXYGEN DEMAND, OR HYDROGEN SULFIDE
- H12 PERFORM ORTHOTOLODINE ARSENITE CHLORINE DETERMINATIONS
- H13 PERFORM PH DETERMINATIONS
- H14 PERFORM PHYSICAL TESTS ON SEWAGE SUCH AS COLOR, ODOR, TEMPERATURE OR SETTLEABLE SOLIDS
- H16 PERFORM TESTS TO DETERMINE FLUORIDE LEVELS IN WATERS
- H17 RECORD RESULTS OF CHEMICAL ANALYSES OF WATER
- I1 COLLECT OR IDENTIFY ADULT MOSQUITOES
- M5 CONDUCT WATER POLLUTION SURVEYS

INDEPENDENT JOB TYPE (A) - CONTINUED

SPECIAL DESCRIPTION

WORK AREA OR ACTIVITY:

COMMUNITY HEALTH	59%
ENTOMOLOGY	21%
EPIDERMIOLOGY	21%
ENVIRONMENTAL HEALTH LAB	24%
ENVIRONMENTAL PROTECTION	17%
INDUSTRIAL HYGIENE	14%
MILITARY QUARANTINE	14%
WATER OR WASTE SURVEILLANCE	76%

ANIMALS COLLECTED:

NONE	38%
COCKROACHES	28%
MOSQUITOES	72%

RADIATION EQUIPMENT USED:

NONE	34%
AN/DPR 27	62%
AN/DPR 43	38%
MICROWAVE SURVEYORS, MODEL 8100/8200	48%
FILM DOSIMETERS	41%
HOLADAY MICROWAVE METERS	38%
PAC 1S	59%

NOISE DETECTION EQUIPMENT:

NONE	24%
OCTAVE BANK NOISE ANALYZERS	38%
SOUND LEVEL CALIBRATORS	38%
SOUND LEVEL METERS	55%

INDUSTRIAL SAMPLING EQUIPMENT:

NONE	21%
AIR SAMPLERS (BATTERY)	35%
BUBBLERS/IMPRINGERS	35%
EXPLOSIVE METERS	35%
HYGROTHERMOGRAPHS	35%
LIGHT METERS	41%
MIDGET IMPRINGERS	35%
PSYCHROMETERS	35%
UNIVERSAL TEST KITS	38%
VELOMETERS	35%
VENTILLATION SMOKE TUBES	45%

WATER TESTING EQUIPMENT:

BACTERIOLOGICAL WATER KITS	90%
CHLORINE COMPARATORS	90%
DUAL RANGE INCUBATORS	38%
FLOURIDE TESTERS	86%
FLUID SAMPLERS, COMPARATORS	31%
PH COMPARATORS	90%
PH METERS (BATTERY)	35%
REFRIGERATORS, BOD	41%
WATER TURBIDITY/COLOR TEST KITS	35%
WATER BATH INDICATORS	62%

SEWAGE TESTING EQUIPMENT:

NONE	34%
BOD TEST APPARATUS	31%
HACH DO TEST KITS	41%
HACH DR-EL TEST KITS	24%

PROTECTIVE EQUIPMENT:

NONE	38%
PROTECTIVE FACE EQUIPMENT	38%
PROTECTIVE CLOTHING	38%
RESPIRATORS (OTHER THAN CHEMOX)	38%

MISCELLANEOUS EQUIPMENT:

NONE	17%
ANALYTICAL BALANCES	31%
CALCULATORS	76%
CAMERAS, POLAROID	41%
MICROSCOPES	41%
PORTABLE GENERATORS	59%
STOP WATCHES	55%
TRIPODS	31%

INDEPENDENT JOB TYPE (B) - RADIOLOGICAL HEALTH PROTECTION PERSONNEL
(GRP016, 2% OF SAMPLE)

GENERAL DESCRIPTION

JOB TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
K CONDUCTING RADIOLOGICAL HEALTH PROGRAMS	37
A PLANNING AND ORGANIZING	17
L PERFORMING OR PRACTICING FIELD MEDICAL DISASTER OPERATIONS	10
C INSPECTING AND EVALUATING	8
B DIRECTING AND IMPLEMENTING	8
E MAINTAINING FORMS, RECORDS, AND PUBLICATIONS	6

GROUP DIFFERENTIATING TASKS:

A3 DETERMINE REQUIREMENTS FOR PERSONNEL, MATERIAL, OR MONEY
A34 WRITE JUSTIFICATIONS FOR PROCUREMENT OF EQUIPMENT, SUPPLIES, OR WORK AREAS
E5 COMPLETE DOSIMETRY DATA FORMS (AF FORM 1523)
E8 COMPLETE USAF RADIATION MONITORING PROGRAM REGISTRATION FORMS (AF FORM 1520)
K1 ANALYZE ISOTOPE SWIPES
K6 COMPUTE RADIATION INTENSITY PROBLEMS
K7 CONDUCT OPERATIONAL CHECKS OF RADIATION DETECTION (RADIAC) EQUIPMENT
K8 CONDUCT RADIATION DOSIMETRY PROGRAMS OTHER THAN THE FILM DOSIMETRY PROGRAM
K12 DIRECT THE DISPOSAL OF RADIOACTIVE WASTE
K13 EVALUATE OPERATIONAL PROCEDURES IN RADIATION EXPOSURE
K15 EVALUATE RADIOLOGICAL DECONTAMINATION PROCEDURES OF PERSONNEL
K18 INSPECT OR EVALUATE PERSONNEL EXPOSURE OR DOSIMETRY RECORDS
K22 ISSUE, COLLECT, OR EXCHANGE DOSIMETER FILM
K29 SHIP OR STORE DOSIMETER FILM
K31 SURVEY HANDLING, STORAGE, RECEIPT, OR SHIPMENT OF RADIOACTIVE MATERIALS
K33 SURVEY RADIOISOTOPES
L2 BRIEF FIELD OFFICIALS ON TYPES OF DECONTAMINATION REQUIRED
L8 DETERMINE DEGREES OR TYPES OF RADIOACTIVE CONTAMINATION DURING DISASTER OPERATIONS
L11 DIRECT RADIOLOGICAL DECONTAMINATION OF PERSONNEL, EQUIPMENT, OR FACILITIES DURING DISASTER OPERATIONS
L12 ESTABLISH OR OPERATE NUCLEAR OR CHEMICAL DECONTAMINATION STATIONS
M9 PERFORM ANALYSES OF SAMPLES AT ENVIRONMENTAL HEALTH LABORATORIES

INDEPENDENT JOB TYPE (B) - CONTINUED

SPECIAL DESCRIPTION

WORK AREA OR ACTIVITY:

DISASTER MEDICINE	13%
ENVIRONMENTAL HEALTH LAB	13%
RADIOLOGICAL HEALTH	87%

RADIATION EQUIPMENT USED:

NONE	0%
(SEE TASK BOOKLET)	

INDUSTRIAL SAMPLING EQUIPMENT:

NONE	38%
AIR SAMPLERS (BATTERY)	38%
AIR SAMPLERS (110V)	62%
HI-VOLUME AIR SAMPLERS	62%

PROTECTIVE EQUIPMENT:

PROTECTIVE FACE EQUIPMENT	38%
PROTECTIVE CLOTHING	88%
RESPIRATORS (OTHER THAN CHEMOX)	38%

MISCELLANEOUS EQUIPMENT:

ANALYTICAL BALANCES	63%
CALCULATORS	88%
CAMERAS, POLAROID	63%
DRAFTING SETS	38%
FILTER ADAPTERS (8X10)	75%
PORTABLE GENERATORS	75%
PORTABLE TRANSMITTERS/RECEIVERS	50%
STOP WATCHES	38%
TRIPODS	50%

APPENDIX B

TABLE I

COMMON TASKS PERFORMED BY 907X0 PERSONNEL (TOTAL SAMPLE)

TASK	TITLE	PERCENT MEMBERS PERFORMING
A2	DESIGN OR DEVELOP INFORMATION CHARTS, STATUS BOARDS, GRAPHS, OR SPOT MAPS	57
A10	DRAFT CORRESPONDENCE SUCH AS LETTERS, MESSAGES, OR MEMOS	86
A11	DRAFT, DEVELOP, OR REVISE FORMS	51
A12	PARTICIPATE IN STAFF MEETINGS OR BRIEFINGS	60
A14	PLAN INSPECTION PROCEDURES	53
A21	PREPARE, DEVELOP, OR REVISE PROCEDURAL GUIDELINES SUCH AS OPERATING INSTRUCTIONS (OI), OR CHECKLISTS	59
B6	DIRECT OR PARTICIPATE IN BASE OR SQUADRON DETAILS	64
C1	COORDINATE WITH BIO-ENVIRONMENTAL ENGINEERS OR PUBLIC HEALTH OFFICERS ON OCCUPATIONAL HEALTH PROBLEM AREAS	68
C24	WRITE INSPECTION REPORTS	60
E4	COMPLETE FLUORIDE/BACTERIOLOGICAL EXAMINATIONS OF WATER FORMS (DD FORM 686)	57
F3	COMPLETE VENEREAL DISEASE CASE REPORTS OR CONTACT REPORTS	64
F8	INTERVIEW VENEREAL DISEASE PATIENTS	70
F17	SCHEDULE FOLLOW UP VISITS OF TUBERCULIN POSITIVE REACTORS, CONVERTERS, CONTACTS, OR CASES	50
F18	SCHEDULE FOLLOW UP VISITS OF VENEREAL DISEASE PATIENTS, CONTACTS, OR SUSPECTS	53
G2	COMPILE RESULTS OF SANITARY SURVEYS OR INSPECTIONS	54
G5	PERFORM SANITARY SURVEYS OF INDUSTRIAL, MEDICAL, OR ADMINISTRATIVE ACTIVITIES	57
G7	SURVEY BARBER OR BEAUTY SHOPS	61
G8	SURVEY BARRACKS, DORMITORIES, BACHELOR OFFICER'S QUARTERS (BOQS), GUEST HOUSING, OR TRANSIENT QUARTERS	54
G9	SURVEY BASE NURSERIES OR CHILD CARE CENTERS	53
G18	SURVEY RECREATION FACILITIES OR PLACES OF PUBLIC ASSEMBLY	51
G19	SURVEY SWIMMING POOLS OR BATHING AREAS	53
G20	WRITE REPORTS OF SANITARY SURVEYS OR INSPECTIONS	62
H1	COLLECT ICE SAMPLES FOR BACTERIOLOGICAL ANALYSIS	53
H2	COLLECT POTABLE WATER SAMPLES FOR ANALYSES	60
H8	PERFORM BACTERIOLOGICAL ANALYSES OF WATER BY MEMBRANE FILTER TECHNIQUE	61
H13	PERFORM PH DETERMINATIONS	60
H16	PERFORM TESTS TO DETERMINE FLUORIDE LEVELS IN WATERS	50
H18	SHIP WATER SAMPLES FOR CHEMICAL OR RADIOLOGICAL ANALYSES	51
J1	BRIEF PERSONNEL ON OCCUPATIONAL OR ENVIRONMENTAL HEALTH HAZARDS	64

TABLE I (CONT)

COMMON TASKS PERFORMED BY 907X0 PERSONNEL (TOTAL SAMPLE)

<u>TASK</u>	<u>TITLE</u>	<u>PERCENT MEMBERS PERFORMING</u>
J2	BRIEF PERSONNEL ON USE OF PROTECTIVE EAR DEVICES	79
J3	BRIEF PERSONNEL ON USE OF PROTECTIVE DEVICES OTHER THAN EAR DEVICES	56
J4	CLASSIFY AUDIOGRAMS	60
J5	COLLECT AIR SAMPLES FROM INDUSTRIAL ENVIRONMENT	60
J6	COLLECT BREATHING ZONE AIR SAMPLES	56
J7	COLLECT CHEMICAL SAMPLES FROM INDUSTRIAL ENVIRONMENT	52
J8	COLLECT DATA ON EQUIPMENT, AIRCRAFT, OR OTHER OPERATIONS WHICH PRODUCE NOISE	55
J10	DETERMINE AND RECOMMEND CONTROL METHODS TO PROTECT WORKERS FROM HAZARDS	34
J13	IDENTIFY HAZARDOUS NOISE AREAS	64
J18	INVESTIGATE OCCUPATIONAL DISEASE OR INJURY CASES	51
J20	INVESTIGATE POSSIBLE CHEMICAL HEALTH HAZARDS	53
J22	ISSUE AND FIT PROTECTIVE EAR DEVICES	71
J24	MONITOR THE PROPER USE OF PERSONAL PROTECTIVE DEVICES	51
J25	MONITOR THE REQUISITION, ISSUE, OR USE OF SOLVENTS TO INSURE MEDICAL CONTROLS ARE MAINTAINED	51
J26	PERFORM AUDIOMETRIC EXAMINATIONS	60
J27	PERFORM ILLUMINATION SURVEYS	70
J28	PERFORM NOISE SURVEYS	71
J29	PERFORM TEMPERATURE AND HUMIDITY SURVEYS	64
J30	PERFORM VENTILATION SURVEYS	66
J32	RECOMMEND CONTROLS FOR HAZARDOUS NOISE	57
J33	RECOMMEND PERSONAL PROTECTIVE DEVICES	62
J35	RESEARCH TEXTBOOKS, MANUALS, OR OTHER PUBLICATIONS TO IDENTIFY CHARACTERISTICS OF CONTAMINANTS	61
J36	REVIEW, EVALUATE, OR CLASSIFY RESULTS OF COMPLETED AUDIOMETRIC EXAMINATIONS	52
J39	SCHEDULE HEARING LOSS PATIENTS FOR REPEAT AUDIOGRAMS	59
J41	SCREEN AUDIOGRAM RECORDS TO DETERMINE IF THERE IS HEARING LOSS	58
J44	SELECT OR CHECK CALIBRATION OF SAMPLING DEVICES USED IN DETECTING HAZARDOUS AGENTS	53
K7	CONDUCT OPERATIONAL CHECKS OF RADIATION DETECTION (RADIAC) EQUIPMENT	53
K22	ISSUE, COLLECT, OR EXCHANGE DOSIMETER FILM	51
K32	SURVEY MICROWAVE OVEN LEAKAGE	60
M2	CALIBRATE SURVEY EQUIPMENT	62

TABLE II

COMMON TASKS PERFORMED BY DAFSC 90750 PERSONNEL

TASK	TITLE	PERCENT MEMBERS PERFORMING
J2	BRIEF PERSONNEL ON USE OF PROTECTIVE EAR DEVICES	84
J22	ISSUE AND FIT PROTECTIVE EAR DEVICES	75
A10	DRAFT CORRESPONDENCE SUCH AS LETTERS, MESSAGES, OR MEMOS	83
J4	CLASSIFY AUDIOGRAMS	67
J26	PERFORM AUDIOMETRIC EXAMINATIONS	64
J28	PERFORM NOISE SURVEYS	74
J27	PERFORM ILLUMINATION SURVEYS	74
H8	PERFORM BACTERIOLOGICAL ANALYSIS OF WATER BY MEMBRANE FILTER TECHNIQUE	67
F8	INTERVIEW VENEREAL DISEASE PATIENTS	77
J39	SCHEDULE HEARING LOSS PATIENTS FOR REPEAT AUDIOGRAMS	66
H2	COLLECT POTABLE WATER SAMPLES FOR ANALYSES	67
H13	PERFORM PH DETERMINATIONS	66
J30	PERFORM VENTILATION SURVEYS	68
E4	COMPLETE FLUORIDE/BACTERIOLOGICAL EXAMINATION OF WATER FORMS (DD FORM 686)	64
J40	SCREEN AUDIOGRAM RECORDS TO DETERMINE IF THERE IS HEARING LOSS	63
G20	WRITE REPORTS OF SANITARY SURVEYS OR INSPECTIONS	64
F3	COMPLETE VENEREAL DISEASE CASE REPORTS OR CONTACT REPORTS	71
G7	SURVEY BARBER OR BEAUTY SHOPS	68
J13	IDENTIFY HAZARDOUS NOISE AREAS	68
H1	COLLECT ICE SAMPLES FOR BACTERIOLOGICAL ANALYSES	60
G5	PERFORM SANITARY SURVEYS OF INDUSTRIAL, MEDICAL, OR ADMINISTRATIVE ACTIVITIES	60
C1	COORDINATE WITH BIO-ENVIRONMENTAL ENGINEERS OR PUBLIC HEALTH OFFICERS ON OCCUPATIONAL HEALTH PROBLEM AREAS	64
J29	PERFORM TEMPERATURE AND HUMIDITY SURVEYS	68
B6	DIRECT OR PARTICIPATE IN BASE OR SQUADRON DETAILS	63
J33	RECOMMEND PERSONAL PROTECTIVE DEVICES	62
M2	CALIBRATE SURVEY EQUIPMENT	65
J5	COLLECT AIR SAMPLES FROM INDUSTRIAL ENVIRONMENT	62
J1	BRIEF PERSONNEL ON OCCUPATIONAL OR ENVIRONMENTAL HEALTH HAZARDS	62
F18	SCHEDULE FOLLOW UP VISITS OF VENEREAL DISEASE PATIENTS, CONTACTS, OR SUSPECTS	61
K32	SURVEY MICROWAVE OVEN LEAKAGE	64
G8	SURVEY BARRACKS, DORMITORIES, BACHELOR OFFICER'S QUARTERS (BOQS), GUEST HOUSING, OR TRANSIENT QUARTERS	60

TABLE III

COMMON TASKS PERFORMED BY DAFSC 90770 PERSONNEL

<u>TASK</u>	<u>TITLE</u>	<u>PERCENT MEMBERS PERFORMING</u>
A10	DRAFT CORRESPONDENCE SUCH AS LETTERS, MESSAGES, OR MEMOS	97
B7	DIRECT SECTION WORK ACTIVITIES	79
C1	COORDINATE WITH BIO-ENVIRONMENTAL ENGINEERS OR PUBLIC HEALTH OFFICERS ON OCCUPATIONAL HEALTH PROBLEM AREAS	81
A12	PARTICIPATE IN STAFF MEETINGS OR BRIEFINGS	86
A7	ESTABLISH WORK PRIORITIES OR PERFORMANCE STANDARDS	82
B19	SUPERVISE ENVIRONMENTAL HEALTH SPECIALISTS (AFSC 90750)	71
J2	BRIEF PERSONNEL ON USE OF PROTECTIVE EAR DEVICES	79
J35	RESEARCH TEXTBOOKS, MANUALS, OR OTHER PUBLICATIONS TO IDENTIFY CHARACTERISTICS OF CONTAMINANTS	75
A21	PREPARE, DEVELOP, OR REVISE PROCEDURAL GUIDELINES SUCH AS OPERATING INSTRUCTIONS (OI), OR CHECKLISTS	78
C17	INSPECT FACILITIES OR WORK AREAS FOR CONDITION OR APPEARANCE	76
C24	WRITE INSPECTION REPORTS	68
A34	WRITE JUSTIFICATIONS FOR PROCUREMENT OF EQUIPMENT, SUPPLIES, OR WORK AREAS	71
A6	ESTABLISH LOCAL PROCEDURES FOR ENVIRONMENTAL HEALTH ACTIVITIES	74
B12	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	78
A3	DETERMINE REQUIREMENTS FOR PERSONNEL, MATERIAL, OR MONEY	76
J22	ISSUE AND FIT PROTECTIVE EAR DEVICES	70
J28	PERFORM NOISE SURVEYS	71
C5	EVALUATE COMPLIANCE OF SUBORDINATES WITH PERFORMANCE STANDARDS	70
E3	COLLECT AND ASSEMBLE INFORMATION FOR PART II OF THE AEROSPACE MEDICINE REPORT	69
J10	DETERMINE AND RECOMMEND CONTROL METHODS TO PROTECT WORKERS FROM HAZARDS	70
B4	COUNSEL SUBORDINATES ON CAREER PROGRESSION OR JOB PERFORMANCE	77
C12	EVALUATE PROGRESS OF SURVEYS ASSIGNED TO SUBORDINATES	65
J1	BRIEF PERSONNEL ON OCCUPATIONAL OR ENVIRONMENTAL HEALTH HAZARDS	73
J33	RECOMMEND PERSONAL PROTECTIVE DEVICES	69
J25	MONITOR THE REQUISITION, ISSUE, OR USE OF SOLVENTS TO INSURE MEDICAL CONTROLS ARE MAINTAINED	67

TABLE III (CONT)

COMMON TASKS PERFORMED BY DAFSC 90770 PERSONNEL

TASK	TITLE	PERCENT MEMBERS PERFORMING
J32	RECOMMEND CONTROLS FOR HAZARDOUS NOISE	68
C16	INSPECT APPEARANCE OF PERSONNEL	74
B2	CLARIFY POLICIES, DIRECTIVES, OR PROCEDURES FOR NEWLY ASSIGNED PERSONNEL	75
B6	DIRECT OR PARTICIPATE IN BASE OR SQUADRON DETAILS	68
J13	IDENTIFY HAZARDOUS NOISE AREAS	65
A14	PLAN INSPECTION PROCEDURES	70
J30	PERFORM VENTILATION SURVEYS	66
J27	PERFORM ILLUMINATION SURVEYS	69
B14	PREPARE WORK OR LEAVE SCHEDULES	68
B1	ASSIGN PERSONNEL TO DUTY POSITIONS	67
J3	BRIEF PERSONNEL ON USE OF PROTECTIVE DEVICES OTHER THAN EAR DEVICES	65
C10	EVALUATE LOCAL DIRECTIVES OR OPERATING PROCEDURES	68
A11	DRAFT, DEVELOP, OR REVISE FORMS	72
J44	SELECT OR CHECK CALIBRATION OF SAMPLING DEVICES USED IN DETECTING HAZARDOUS AGENTS	66
B3	CONDUCT SUPERVISORY ORIENTATION OF NEWLY ASSIGNED PERSONNEL	69
A2	DESIGN OR DEVELOP INFORMATION CHARTS, STATUS BOARDS, GRAPHS, OR SPOT MAPS	76

TABLE IV

COMMON TASKS PERFORMED BY DAFSC 90790 PERSONNEL

<u>TASK</u>	<u>TITLE</u>	<u>PERCENT MEMBERS PERFORMING</u>
A10	DRAFT CORRESPONDENCE SUCH AS LETTERS, MESSAGES, OR MEMOS	100
A34	WRITE JUSTIFICATIONS FOR PROCUREMENT OF EQUIPMENT, SUPPLIES, OR WORK AREAS	89
B7	DIRECT SECTION WORK ACTIVITIES	84
C12	EVALUATE PROGRESS OF SURVEYS ASSIGNED TO SUBORDINATES	79
A12	PARTICIPATE IN STAFF MEETINGS OR BRIEFINGS	95
C10	EVALUATE LOCAL DIRECTIVES OR OPERATING PROCEDURES	84
C23	REVIEW OR EVALUATE INSPECTION REPORTS	84
C1	COORDINATE WITH BIO-ENVIRONMENTAL ENGINEERS OR PUBLIC HEALTH OFFICERS ON OCCUPATIONAL HEALTH PROBLEM AREAS	79
C16	INSPECT APPEARANCE OF PERSONNEL	100
B10	INITIATE RECOGNITION FOR COMMENDABLE PERFORMANCE	89
A7	ESTABLISH WORK PRIORITIES OR PERFORMANCE STANDARDS	79
A3	DETERMINE REQUIREMENTS FOR PERSONNEL, MATERIAL, OR MONEY	89
C22	PREPARE REPLIES ON ACTION ITEMS IN RESPONSE TO INSPECTION REPORTS	84
C24	WRITE INSPECTION REPORTS	79
B21	SUPERVISE ENVIRONMENTAL HEALTH TECHNICIANS (AFSC 90770)	84
A22	PREPARE FINANCIAL REPORTS OR SUMMARIES SUCH AS BUDGETS, FINANCIAL PLANS, OR ESTIMATES OF EXPENDITURES	84
B8	INITIATE PERSONNEL ACTION REQUESTS	89
A1	CONDUCT STAFF MEETINGS OR BRIEFINGS	95
C4	EVALUATE COMPLETED SPECIAL PROJECTS	79
A21	PREPARE, DEVELOP, OR REVISE PROCEDURAL GUIDELINES SUCH AS OPERATING INSTRUCTIONS (OI), OR CHECKLISTS	84
B4	COUNSEL SUBORDINATES ON CAREER PROGRESSION OR JOB PERFORMANCE	84
B1	ASSIGN PERSONNEL TO DUTY POSITIONS	79
B12	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	79
D20	NOMINATE OR SELECT INDIVIDUALS TO RECEIVE TRAINING OR TO ATTEND COURSES	79
A6	ESTABLISH LOCAL PROCEDURES FOR ENVIRONMENTAL HEALTH ACTIVITIES	74
B3	CONDUCT SUPERVISORY ORIENTATIONS OF NEWLY ASSIGNED PERSONNEL	84

TABLE IV (CONT)

COMMON TASKS PERFORMED BY DAFSC 90790 PERSONNEL

<u>TASK</u>	<u>TITLE</u>	<u>PERCENT MEMBERS PERFORMING</u>
A28	REVISE OR EDIT DIRECTIVES SUCH AS MANUALS, REGULATIONS, SUPPLEMENTS, OR OTHER PUBLICATIONS	74
C17	INSPECT FACILITIES OR WORK AREAS FOR CONDITION OR APPEARANCE	74
B14	PREPARE WORK OR LEAVE SCHEDULES	79
A25	PREPARE, RESEARCH, OR EDIT PROBLEM-SOLVING REPORTS SUCH AS STAFF SUMMARIES OR ONE-TIME REPORTS ON ITEMS OF INTEREST	79
C19	INVESTIGATE ACCIDENTS OR INCIDENTS	74
B2	CLARIFY POLICIES, DIRECTIVES, OR PROCEDURES FOR NEWLY ASSIGNED PERSONNEL	79
A11	DRAFT, DEVELOP, OR REVISE FORMS	74
A26	RESEARCH OR EDIT INPUTS FOR RECURRING REPORTS	74
A5	DEVELOP PROCEDURES FOR MAINTENANCE OR DISPOSITION OF RECORDS	79
A4	DEVELOP INPUT TO OPERATIONS PLANS, OPERATIONS ORDERS, OR DISASTER CONTROL PLANS	74
A2	DESIGN OR DEVELOP INFORMATION CHARTS, STATUS BOARDS, GRAPHS, OR SPOT MAPS	74
C15	EVALUATE SUGGESTIONS	74

APPENDIX C

TABLE I
TECHNICAL TASKS NOT CROSS-REFERENCED TO STS 907X0

TASKS		PERCENT MEMBERS PERFORMING			
		DAFSC		DAFSC	
		90730	90750	90750	90770
F1	ADMINISTER TUBERCULIN SKIN TESTS	12	11	5	
F6	DETERMINE REACTIONS TO TUBERCULIN SKIN TESTS	27	26	16	
G5	PERFORM SANITARY SURVEYS OF INDUSTRIAL, MEDICAL, OR ADMINISTRATIVE ACTIVITIES	58	60	55	
G10	SURVEY BASE SCHOOLS	24	27	24	
G11	SURVEY CHEMICAL TOILETS	24	24	15	
G12	SURVEY FAMILY QUARTERS OR MOBILE HOMES ON BASE	24	27	23	
G16	SURVEY OFF-BASE FAMILY QUARTERS	9	11	14	
I4	COLLECT OR IDENTIFY HOST ANIMALS OTHER THAN RODENTS	9	6	7	
I14	INVESTIGATE BIRD-RELATED PROBLEMS	6	16	20	
I15	INVESTIGATE REPTILE-RELATED PROBLEMS	6	7	7	
I19	MAKE RECOMMENDATIONS FOR CONTROL OF BIRDS	6	11	18	
I20	MAKE RECOMMENDATIONS FOR CONTROL OF REPTILES	6	7	9	
I22	MAKE RECOMMENDATIONS FOR CONTROL OF SMALL ANIMALS OTHER THAN RODENTS	6	9	9	
I30	PLAN CONTROL PROGRAMS FOR BIRDS OR REPTILES WITH BASE CIVIL ENGINEERING ENTOMOLOGY SECTION	6	5	10	
J17	INVESTIGATE ENVIRONMENTAL DIFFERENTIAL PAY OCCUPATIONS	12	18	39	
J21	INVESTIGATE POSSIBLE PHYSICAL HEALTH HAZARDS	27	42	53	
J22	ISSUE AND FIT PROTECTIVE EAR DEVICES	70	75	70	
J38	REVIEW REPORT OF INJURY FORMS	6	24	41	
K5	COLLECT WATER SAMPLES FOR RADIATION BASELINE STUDIES	21	18	30	
K30	SUBMIT REQUESTS FOR RADIOISOTOPE PERMITS	6	8	26	
M6	MAINTAIN DISEASE VECTOR POPULATIONS IN THE EPIDEMIOLOGICAL LABORATORY	6	5	3	
M7	MAINTAIN INFECTED HOST ANIMAL COLONIES IN THE EPIDEMIOLOGICAL LABORATORY	6	2	1	
M8	MAINTAIN UNINFECTED HOST ANIMAL COLONIES IN THE EPIDEMIOLOGICAL LABORATORY	6	2	1	
M9	PERFORM ANALYSES OF SAMPLES AT ENVIRONMENTAL HEALTH LABORATORIES	9	6	7	
N1	DETERMINE AMOUNT OF NEUTRALIZERS NEEDED IN SPILL EMERGENCIES	0	6	10	
N2	MONITOR COMMUNICATION PANELS OR VAPOR DETECTORS	0	5	5	
N3	MONITOR DECONTAMINATION OPERATIONS OF MISSILE AUXILIARY EQUIPMENT	0	2	4	
N4	MONITOR PAINTING OR PAINT STRIPPING FOR CONTROL OF ATMOSPHERIC TOXINS	3	7	9	
N5	MONITOR MISSILE DECONTAMINATION OPERATIONS	0	2	3	
N6	MONITOR PROPELLANT HOLDING OPERATIONS	0	2	3	
N7	MONITOR PROPELLANT PUMP CHANGE OPERATIONS	0	1	3	
N8	MONITOR PROPELLANT TRANSFER OPERATIONS	0	3	4	
N9	MONITOR RADIOACTIVE COMPONENTS OF MISSILES	3	3	5	
N10	MONITOR WEARING OF PROTECTIVE EQUIPMENT BY PERSONNEL HANDLING MISSILE PROPELLANTS	3	5	9	
N11	PLOT HAZARDOUS CORRIDORS	0	3	5	